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PACHMARHI AND CHAURAGARH HILL.

CENTRAL PROVINCES
DISTRICT GAZETTEERS

HOSHANGABAD DISTRICT

VOLUME A
DESCRIPTIVE

BY

G. L. CORBETT
Assistant Commissioner, Hoshangābād

AND

R. V. RUSSELL
Gazetteer Superintendent

PRINTED BY
THACKER, SPINK & CO
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1908

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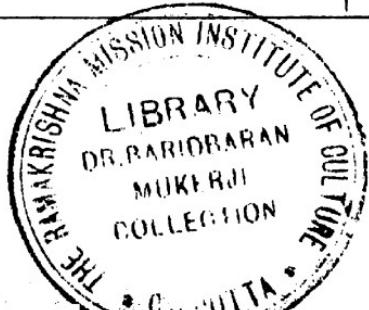
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*Names of the Deputy Commissioners who have held
charge of the Hoshangābād District.*

NAME OF DEPUTY COMMISSIONER.	PERIOD	
	From	To
Col. W. Nembhard ...	...	April 1855
„ I. G. Thomason	...	February '56
„ Vertue	...	April '56
„ J. C. Wood	...	July '60
Major C. Baldwin	...	February '62
Col. F. Fenton	...	September '63
J. F. Beddy, Esq.	...	May '64
Col. W. H. Crichton	...	January '69
„ C. H. Plowden	9-1-69	July '69
„ J. K. Dennys	...	August '70
Major W. B. Thomson	...	March '72
Col. J. K. Dennys	...	December '73
Major H. J. Lugard	26-12-73	May '74
Col. J. K. Dennys	...	March '75
Major M. P. Ricketts	28-3-75	19-4-76
Captain E. W. C. H. Miller	20-4-76	28-8-76
Major M. P. Ricketts	29-8-76	27-7-77
„ H. M. Repton	28-7-77	11-11-77
„ M. P. Ricketts	12-11-77	March '78
Col. R. Glasfurd	...	June '78
Major M. P. Ricketts	23-6-78	22-3-81
„ W. S. Brooke	23-3-81	3-8-83
D. O. Meiklejohn, Esq., I.C.S.	4-8-83	15-11-83
Major W. S. Brooke	16-11-83	6-11-84
„ M. P. Ricketts	7-11-84	28-3-85
H. H. Priest, Esq., I.C.S.	29-3-85	2-4-85
Col. C. H. Grace	3-4-85	15-4-87
„ C. H. Plowden	16-4-87	27-8-90
L. K. Laurie, Esq., I.C.S.	28-8-90	30-4-91
C. W. McMinn, Esq., I.C.S.	1-5-91	26-8-91
A. L. Saunders, Esq., I.C.S.	27-8-91	9-12-91
E. Gray, Esq., I.C.S.	10-12-91	3-12-95
H. A. Crump, Esq., I.C.S.	4-12-95	3-4-98
C. R. Cleveland, Esq., I.C.S.	4-4-98	11-5-98
A. S. Womack, Esq., I.C.S.	12-5-98	29-3-01
R. C. H. M. King, Esq., I.C.S.	30-3-01	10-8-01
C. E. Low, Esq., I.C.S.	11-8-01	7-10-02
Syed Mahdi Hasan, Esq.	8-10-02	19-10-02
E. A. De Brett, Esq., I.C.S.	20-10-02	18-3-05
C. G. Leftwich, Esq., I.C.S.	19-3-05	4-12-05
Syed Mahdi Hasan, Esq.	5-12-05	17-12-05
C. W. E. Montgomerie, Esq., I.C.S.	18-12-05	20-3-06
R. G. Pantin, Esq., I.C.S.	21-3-06	5-7-08
A. E. Nelson, Esq., I.C.S.	6-7-08	...



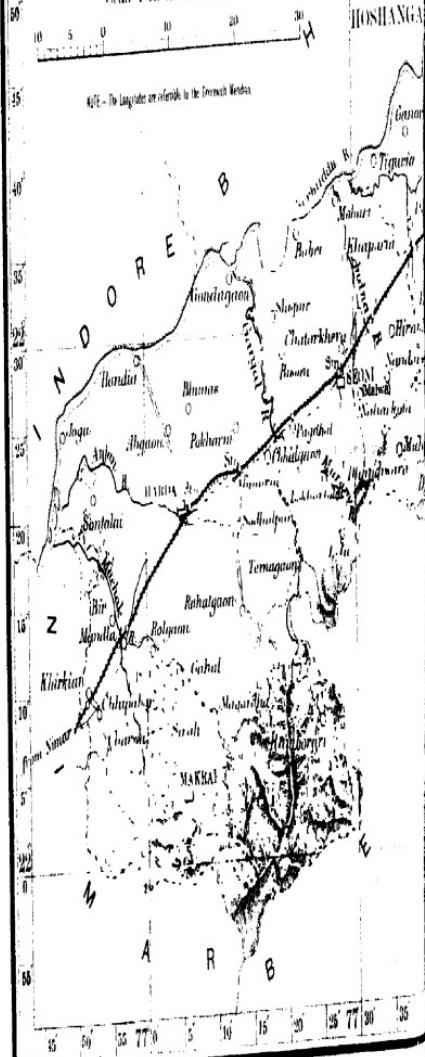
OFFICIAL MAPS

DISTRICT
HOSHANGABAD

Scale 1 Inch = 16 Miles



Note - The boundaries are referable to the Government Record.



HOSHANGABAD

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M A H O B A

J H A N S I

V A R A N A S I

A L L A H A B A D

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K A N N A U J

HOSHANGABAD DISTRICT.

CHAPTER I.

GENERAL DESCRIPTION.

SITUATION AND PHYSICAL FEATURES.

1. The Hoshangābād District is the headquarters District of the Nerbudda Division of the Central Provinces. Lying between latitude $21^{\circ} 53'$ and $22^{\circ} 59'$ N. and longitude $76^{\circ} 47'$ and $78^{\circ} 44'$ E., it covers an area of 3676 square miles. It is a long irregular strip of country, stretching along the left bank of the Nerbudda valley between the Vindhyan mountains and the Sātpurā hills, and including part of the latter range within its borders. Its average length is about 120 miles, and though at its eastern and western extremities it widens out, the breadth is not usually more than 25 miles. The northern boundary of the District is the river Nerbudda, beyond which are the Native States of Bhopāl and Indore; on the east the river Dudhi separates it from Narsinghpur; to the west lies Nimār; and on the south it marches with Chhindwāra and Betūl. The District is divided into four tahsils, of which the easternmost is Sohāgpur and the westernmost Hardā, while between them lie Hoshangābād and Seoni, called Mālwā, to distinguish it from the District of Seoni-Chhapāra. There is also a separate tahsildār at Pachmarī, a military sanitarium and the summer residence of the Local Administration, which is perched on a plateau among the hills in the south-east corner of the Sohāgpur tahsil. In the south-west of the Hardā tahsil is the Feudatory State of Makrai, for which the Deputy Commissioner of Hoshangābād acts as Political Agent. The south-east of the Sohāgpur tahsil is

Position and boundaries.

occupied by the Chhāter, Bāriām-Pagāra and Pachmarī jāgirs.

2. The District of Hoshangābād falls naturally into two parts, the hills and the valley. The Natural features. Division into hill and whole of the south is occupied by the valley.

Sātpurā range, rising in a continuous chain of forest-clad hills. Between this and the Nerbudda is a narrow strip of nearly level country, some 15 miles across, which slopes gently down towards the river, with slight undulations between the many tributary streams flowing northwards from the hills. Beyond the Nerbudda, again, rise the Vindhyan mountains. This division into hill and valley is not, however, absolute. Isolated knolls and low stony ranges are not infrequently found in the plain. The Sātpurās, indeed, which generally run in ranges parallel to the line of the valley, throw out but few spurs at right angles to it, and trend away regularly to the west-south-west. But the Vindhyan mountains are much more erratic in direction, and uncertain in appearance. In many places they are only to be seen from the Nerbudda as a far off outline; and the northern half of the basin, belonging to Bhopāl or Indore, appears as broad and fertile as the southern. At other times they run suddenly in and then turn and follow the river, which washes their bases for miles. In such places outlying spurs and hills are generally found on the southern side. One such spur, called the Black Rocks, crops up close to Hoshangābād, and supplies the town with building and paving stone. Further west are the Guāri and Damausā hills, while at the extreme north-west the Vindhyan appear south of the Nerbudda in long, low, stony ranges, known as the Bairī hills, which almost unite with an offshoot of the Sātpurās and obliterate the plain.

3. With these exceptions the valley is one almost continuous wheat tract of rich black soil, The Nerbudda valley. only broken here and there by strips of poorer cultivation, and dotted with villages thickly peo-

PREFATORY NOTE.

IN this volume the chapter on History and Archaeology and the sections on Religion, Caste, Social Life and Customs, and Language are written by R. V. Russell, Gazetteer Superintendent, and all the remainder of the volume by G. L. Corbett, Assistant Commissioner, Hoshangābād. The section on Geology, with some information on Minerals, was contributed by Mr. H. Walker of the Geological Survey. The extant Settlement Reports on the District are those of Mr. (Sir C.) Elliott (1865) and of Mr. F. G. Sly (1896). Sir C. Elliott's Report is one of the most valuable works relating to the Central Provinces, and both Reports have been referred to freely in the Gazetteer. Sir C. Elliott's excellent monograph on the Korkūs, printed as an Appendix to his Report, has been reproduced in an abridged form. Captain J. Forsyth's book, 'The Highlands of Central India' contains much that is of interest concerning Pachmarī and the Mahādeo Hills. The history of the Jāgirdāri Settlements is derived from Mr. Sly's Report (1896). The effects of the famines of 1897 and 1900 are detailed in the Report of Mr. C. E. Low on the subsequent abatement proceedings (1902). Valuable notes on Agriculture have been supplied by Mr. Sly and by Mr. G. Evans, Deputy Director of Agriculture. The chapter on Agriculture has been read by Mr. Low and Mr. Evans, and that on Land Revenue Administration by Mr. C. W. Montgomerie. Mr. A. A. Dunbar-Brander I. F. S. has supplied notes on Botany and Wild Animals, and he and Mr. R. S. Hole I. F. S. have read in manuscript the chapter on Forests. Captain G. Fowler I. M. S. has furnished a note on diseases. Mr. A. Taylor of the Friends' Mission has sent an interesting account of Mahādeo Fair.

NAGPUR,
24th March 1908. }

G. L. C.
R. V. R.

HOSHANGABAD DISTRICT GAZETTEER.

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pled by a prosperous agricultural community. Although not comprising much more than half the total area, it contains practically the whole of the cultivation and population of the District, and, except for the important item of forest produce, almost all its trade and wealth. Generally speaking, the east is poorer than the west, and the Sohāgpur tahsil, which contains the large estates of four Gond Rājās and all or part of three jāgīrs, is the least fertile and the least prosperous in the District. The land is lighter and the country more undulating than elsewhere, and it is intersected by many rivers and jungle-girt ravines, which wash away the finer constituents of the soil. But Sohāgpur has its revenge in its greater natural beauty. The country is studded with noble mahuā trees (*Bassia latifolia*), which in many parts almost give it the appearance of an English park. There is less monotony in the scenery, and more undulation to break the view, while everywhere the grand Mahādeo hills are full in sight. Further west, in the Hoshangābād tahsil, the streams are less numerous and do less damage to the soil, while beyond the large river Tawā the plain of Raisalpur is one of the richest in the District. The country too is not unpicturesque : for though the plain is flat and monotonous, the bold conical hill of Sirisdeo, backed by forest-clad ranges, to the south, and the curiously formed Vindhyan hills, which rise abruptly from the river bank to the north, help to relieve the landscape, and in the early spring form an admirable setting to the level and unbroken expanse of ripening wheat. The Seoni tahsil is a level and almost continuous stretch of fertile soil; and though on its eastern and western borders, where considerable streams descend from the hills, there are strips of wooded country, the main ranges, which hem in the valley on the north and south, here recede and widen out the plain. This is the seat of perhaps the oldest civilisation in the District. The main body of its inhabitants were probably amongst the first immigrants from Upper India, and Seoni has enjoyed a more

unbroken continuity of cultivation than any other tahsil. The eastern portion of the Hardā tahsil is somewhat similar in its physical features to Seoni. But further west, in the Bairī and Chārwa tracts, the country is hilly and stony, and much of the light soil is only now being reclaimed from waste. Such are the main features of the Hoshangābād valley, and its distinguishing characteristic is its great fertility, for which it has long been justly famous. More than forty years ago Mr. (Sir C.) Elliott, when Settlement Officer of the District, described it as the richest and most fertile valley in India. ‘The cultivation,’ he wrote¹, ‘may be rougher and less careful than elsewhere; but this is the only soil in the world which will bear wheat crops for forty years in succession without a fallow and without manure. The produce per acre may be less than in higher cultivated countries, but there is no part of India which exports so much wheat absolutely, and probably none which exports so much per head of its cultivating population—none, that is, where an equal amount of labour creates a larger produce. Of the many districts to which the title of “the “Garden of India” has been given, none perhaps deserves it better than Hoshangābād.’

4. The Sātpurā range, which covers the southern half of the District, is but a background to the hills. The picture—a background of great beauty, with lofty rugged hills covered with deep forest, culminating in the Pachmarī plateau, which is some 3500 feet above the sea-level, and is surrounded with peaks about a thousand feet still higher. It may be noticed that the use of the word Sātpurā to denote the whole range of hills along the south of the Nerbudda seems to be purely European, and the name should properly be confined to the block which lies to the south-west of the District in Nimār. The native mind, never having regarded the whole mass of hills as a single range or a collective unity, has given a distinct name to

¹ Settlement Report, Chap. I, para. 8.

each separate block which, from height or sacredness, has acquired some degree of notoriety. Of these the most important are the Mahādeo hills, among which the Pachmarī plateau is situated. The Mahādeo hills include the whole mass of sandstone mountain which is encircled by the Denwā and Sonbhadrā rivers, but the name is especially applied to a single peak 4384 feet high, rising from the southern edge of the Pachmarī plateau, at the foot of which are the sacred cave and shrine of Mahādeo. The Mahādeo *massif* contains the finest hills in the whole Sātpurā range, including Dhūpgarh (4454 feet), which is the highest point between the Nilgiris and the Himālayas, Chaurāgarh (4317 feet) and Belkandhār (3779 feet). North-west of this the bluff sandstone hills of Chhāter (2935 feet) and Doria (2921 feet) separate the District from Chhindwāra. West of Mahādeo lie the Mālni hills, bounded on three sides by the Sonbhadrā, Denwā and Tawā rivers. Wild and barren standstone hills alternate with open valleys, and the highest eminence is the conspicuous hill of Tek (2728 feet) to the south of Sohāgpur, which has been found to be of considerable value as a surveying station. The range dwindles somewhat in the Hoshangābād and Seoni tahsils, and the only features of interest are the Bordhā plateau, which contains a fair proportion of cultivated land, and the bold peak of Sirisdeo (2158 feet), to the south of Itārsi. In the Hardā tahsil, however, the Rājaborāri tract includes a large area of low hills and forest. The formation here is pure trap. South-west of this are the trap hills of Kālibhīt, which were transferred to the Nimār District in 1904. The hill country is almost one continuous stretch of forest. Generally rocky and unculturable, in some open plateaus, and particularly in the valleys of the more important rivers, a more fertile soil is to be found, some of which is already occupied by villages, while some has recently been disforested and thrown open to cultivation on ryotwāri tenure. In these hill tracts villages held in ordinary proprietary right are but few; but the south-east of the Sohāgpur tahsil is

occupied by the jāgīrs, and there are clusters of mālguzārī villages in the Denwā valley, on the plateau of Bordhā and in Rājaborāri. The remainder is almost entirely Government forest. Population is sparse and consists with few exceptions of aboriginal tribes of Gonds and Korkūs, who carry on a rude cultivation in forest clearings, frequently shifting their habitation, while the Hindu has penetrated to and occupied the more fertile spots.

5. Hoshangābād is essentially a District of rivers. Many streams, large and small, flow down from the Sātpurās, generally in a north-westerly direction, into the Nerbudda. The Nerbudda itself is a fine river, about half a mile wide, flowing between steep well-defined banks, which are filled to the top during floods in the rains. Its channel is navigable only for a short period of the year, and is not now used for traffic. The most important tributary is the Tawā with its affluents. The Tawā rises in the Chhindwāra District and flows down through the forests from the Betūl hills in a broad deep stream, spreading out into a wide sandy bed as it enters the plain. It joins the Nerbudda at Bāndarābhān, four miles above Hoshangābād, but the waters of the two rivers are supposed not to intermingle, and at the festival of Til-Sankrānt many Hindus of Hoshangābād cross over to the northern bank to bathe in the sacred Nerbudda. The Tawā drains a wide watershed and has numerous tributaries, of which the Sukhtawā, the Gurgugonā and the Mālni are all considerable streams. But its most important affluent is the Denwā, a river of almost equal volume, which rises on the eastern slope of the Pachmarī hills, and after descending in a northerly direction through a very fine defile, above which the Pachmarī road has been constructed, turns due west and flows down between two parallel ridges of the Sātpurās to meet the Tawā just before it quits the jungle. At Chormālni the Denwā is joined by another large river, the Sonbhadrā, which, with its tributary the Borī, drains

Rivers.

Bennise, Child, Derby.

THE NERBUDDA AT HOSHANGABAD.





VILLAGE AND BETEL-VINE GARDENS, TEKIPURA.

Benrose, Collo, Perry.

the western slope of the Pachmarī hills, and then turns north and forces a passage into the Denwā valley through the intervening ridge. This gorge, impassable except on foot, is of striking grandeur. Another considerable tributary of the Denwā is the Nāg Dewāli, a beautifully clear rocky stream, which rises near Pachmarī in the deep gorge known as Jambudwīp, and descends north-westwards through the hills in a series of charming cascades, finally joining the Denwā near Kukrā. Next in importance to the Tawā is the Ganjāl river, which divides the Seonī from the Hardā tahsil. Its source is in the Rājaborāri forest, and near Chhidgaon railway station it receives an important tributary, the Moran river, which descends from the Betūl hills through the jungles of Lokhartalai. Other rivers of some size and importance are the Dudhī, the Palakmatī, the Hatarā, whose upper waters flow through a sandstone ravine of remarkable beauty, the Ajnāl and the Machak, while the southernmost portion of the Hardā tahsil is in the watershed of the Tāpti. All these rivers flow in deep beds, which in the east are generally sandy, but in the west are often rocky. The violence of their floods can be judged from the fact that in one night of September 1864, after 11 inches of rain had fallen in 36 hours, the stone piers of the Bāgra railway bridge, 12 feet by 50 in width and length, were snapped in two by the torrent of the Tawā. Another characteristic of the rivers of this District is percolation. Some of the smaller streams disappear altogether, as they issue from the hills, and flow underground for some distance, and in other cases a considerable volume of water percolates through the soil beneath the river bed. Thus even in the hottest months, when the beds are dry, water can nearly always be found two or three feet below the surface.

6. The fall of the Nerbudda during its course in the District is about three feet in a mile. The Elevation. plain which constitutes the valley is very

flat, rising but slightly towards the hills, and sloping gently westwards with the fall of the river. Bankherī, the easternmost railway station, is 1159 feet above the sea, and Khirkiān, the westernmost, is 915 feet above the sea. The distance between them is 120 miles, so that the fall of the railway line is 2 feet a mile. The highest part of the hill tract, and indeed of the whole Sātpurā range, is the Mahādeo hills, at the south-east corner of the District. The Pachmarhi plateau is 3500 feet above the sea, and the surrounding peaks are about 1000 feet higher. Of them, Dhūpgarh (4454 feet) is the highest point between the Nilgiris and the Himālayas. Elsewhere in the District the range maintains a level of about 2000 feet, while the lateral valleys vary from about 1200 feet to 1700 feet. The only important plateau is that of Bordhā, which is 1300 feet above the sea.

GEOLOGY—(H. WALKER).

7. An alluvial plain stretches southwards from the Ner-budda as it flows through this District General. and with few exceptions no rock exposures are seen. To the west of Handia and also in the sub-montane tracts of the Sātpurā hills, outcrops of rock are very commonly met with. The hill country of the eastern and central portions of the District, with the highest peaks in the Pachmarhi hills, consists almost entirely of rocks of the Gondwāna system. The western and south-western tracts are covered with large flows of basalts of the Deccan trap.

In the west of the District, and continuing for 15 to 20 miles from the basalt plateau there is a regular scarp, 800 to 1000 feet high, forming the edge of a plateau composed principally of massive sandstones. To the east this plateau is cut off from the great range of the Pachmarhi hills, and while retaining a gentle westerly dip, presents a steep scarp to the broad undulating valley of the Tawā river, which lies to the east. As one passes eastwards, the above-mentioned scarp

gives way to an outer range of low hills, irregular in outline which leaves a clear view of the Pachmarī range to the south. Throughout this range there is a gentle dip to the north.

8. The appended list shows what formations are met

List of formations. with in the District:—

1. Soil and Alluvium.
2. Laterite.
3. Deccan Trap.
4. Gondwāna Series.
 (a) Jabalpur group.

and Limestones).

9. The eastern and central portions of the plain of the Nerbuddā in this District are covered by Alluvium.

alluvium consisting of a stiff reddish, yellowish, or brownish clay with numerous intercalated bands of sand and gravel. *Kankar* abounds throughout and pisolithic iron granules are of frequent occurrence. The thickness of the alluvial deposits as exposed along the banks of the rivers, usually does not exceed 100 feet. That the alluvium varies greatly in thickness is shown by the record of the boring at Suākheri made in search of coal. This went through 491 feet of alluvium and the base was not reached. The valley from Hoshangābād to Hardā consists of a gently undulating plain of cotton soil. In general, no rocks appear in the streams. South of Hardā, towards Chārwa, there is a

flat, rising but slightly towards the hills, and sloping gently westwards with the fall of the river. Bankherī, the easternmost railway station, is 1159 feet above the sea, and Khirkiān, the westernmost, is 915 feet above the sea. The distance between them is 120 miles, so that the fall of the railway line is 2 feet a mile. The highest part of the hill tract, and indeed of the whole Sātpurā range, is the Mahādeo hills, at the south-east corner of the District. The Pachmarhi plateau is 3500 feet above the sea, and the surrounding peaks are about 1000 feet higher. Of them, Dhūpgarh (4454 feet) is the highest point between the Nilgiris and the Himalayas. Elsewhere in the District the range maintains a level of about 2000 feet, while the

ERRATUM.

Page 8, line 11.—*Insert “except Mount Abu” after “Himalayas”.*

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2. Laterite.

3. Deccan Trap.

4. Gondwāna Series.

(a) Jabalpur group.

Mahādeva group.

(b) Upper. { Bāgra beds.
Denwā beds. } Upper
Gondwāna.

(c) Lower. Pachmarī beds.

(d) Dāmuda group.

(e) Tälcher group. } Lower
Gondwāna.

5. Vindhyan sandstones.

6. Crystalline rocks (including the Bijāpur Quartzites and Limestones).

9. The eastern and central portions of the plain of the Nerbudda in this District are covered by alluvium consisting of a stiff reddish,

yellowish, or brownish clay with numerous intercalated bands of sand and gravel. *Kankar* abounds throughout and pisolithic iron granules are of frequent occurrence. The thickness of the alluvial deposits as exposed along the banks of the rivers, usually does not exceed 100 feet. That the alluvium varies greatly in thickness is shown by the record of the boring at Suākheri made in search of coal. This went through 491 feet of alluvium and the base was not reached. The valley from Hoshangābād to Hardā consists of a gently undulating plain of cotton soil. In general, no rocks appear in the streams. South of Hardā, towards Chārwa, there is a

great bay of alluvium stretching further to the west. This large quantity of surface deposits away from the river appears to indicate a former distribution of the rivers throughout this country different from that at present prevailing. Three small exposures of laterite are to be met with about half a mile to the east of Sontalai village. The material is pisolithic hematite.

10. The rocks of the Deccan Trap Series which occupy the south-western corner of the District,

The Deccan trap. consist for the most part of fine-grained compact basalts. Beds of vesicular basalts are also met with, and in many places they pass into amygdaloidal types in which the amygdules are infilled with zeolites, calcite, or some form of silica.

Over this country the traps are in almost perfect horizontality, and the dips, if any occur, are very slight. The flattened summits of the hills, the lines of stratification conspicuously seen upon them, the paucity of large trees and the abundance of long grass, enable one to distinguish from a distance, and almost with certainty, which are trap hills. Small areas occupied by the Deccan trap are to be met with in the eastern parts of the District. These have probably formed, at one time, part of the large basalt plateau which now exists in the Chhindwāra District.

Trap dykes traverse all the formations, but nowhere are they so abundant as in the Jabalpur and Upper Mahādeva groups. That these intrusive dykes all belong to the period of the Deccan trap outspread would also seem evident, for in many places the dykes are confluent with great overlying masses, becoming lost in them ; and also, sheets of trap intrusive between the sedimentary strata are continuous with the main superficial flows. There is a marked concentration of dykes near the northern margin of the Gondwāna rocks.

11. The peaks of Chhāter and Doria lie to the east-south-east of Fatehpur and are distant 4 and 7 miles respectively. Massive sandstones form the summits of these hills and are the only representatives of the Jabalpur group to be seen in this District.

Upper Gondwāna rocks. Jabalpur and Mahādeva groups.

The northern line of hills extending from near Lokhartalai to beyond Fatehpur is formed almost wholly of the uppermost horizon of the Mahādeva group. These beds are named Bāgra from an old fort built upon them at the mouth of the Tawā gorge. The transverse extension of these beds is small in comparison with the longitudinal, and there is no sign of them south of the Denwā river along the greater portion of its course. The composition of this group is remarkably variable. Westwards from the neighbourhood of Fatehpur to near Nandarwāra the rocks present everywhere the same irregularities of composition—sandstones, clays, limestones and conglomerates without any assignable order, horizontal or vertical, only that the conglomerates are always in greatest force near to the main boundary. From Sāli (near Nandarwāra) to Lokhartalai there is a well-defined scarped edge of conglomerates and sandstones.

The boundary between the beds of the upper, or Bāgra horizon, and those of the lower, or Denwā horizon of the Mahādeva group is only locally well defined. This is due to the variable nature of the upper deposits which sometimes give somewhat similar beds at the junction to the lower ones. In the greater part of the Denwā valley the beds are thick and of pale greenish yellow and bright red mottled clays with discontinuous and subordinate bands of white sandstone, and very rarely limestone. The southern boundary of this horizon is usually well-defined, the clays lapping upon the unbroken sandstones of the Pachmarī group.

12. The Pachmarī sandstones are named after that station, in the neighbourhood of which they attain their maximum development.

Pachmarī beds.

The width of the outcrop at this part is about 12 miles, from north to south ; there is a steady dip of 10° to the north and a thickness of at least 8000 feet. As the outcrop is followed to the west, one sees that it rapidly narrows in a north and south direction. This narrowing of the outcrop is accompanied by a decrease in the thickness of the strata. Thus, at the gorge of the Sonbhadrā river the width of outcrop is 4 miles ; there is a steady northerly dip of 10° , and a total thickness of strata of 3500 feet. In the gorge of the Tawā river the thickness of the strata is 1700 feet, and these are spread over an outcrop 2 miles in width. From here the beds sweep in a large curve to the southwards and finally die out not far from the upper courses of the Sukhtawā river.

This group is for the most part the simplest and best defined of the whole series. It consists entirely of massive banks of sandstone, with overlapping superposition amongst themselves, and is generally in sharp contact with clay deposits on the north, and with shaly carbonaceous beds at its base on the south.

13. The rocks of the Dāmuda group are exposed towards the south-eastern limits of the Dāmuda group. District, in the hills to the south and west of Pachmarhī. The beds of this group consist of an upper horizon—the Bijori—and a lower one—the Motur. Of these, the latter is not represented in this District.

A succession of thick soft sandstones with a few subordinate layers of brown and red clay, with occasional faint carbonaceous markings, is typical of the beds of the Bijori horizon. Near to the high level villages of Rorighāt and Almod, 4 miles S.-W., and 5 miles S.-S.-W. of Pachmarhi respectively, there are some beds of sandy micaceous shale, locally carbonaceous and with faint plant impressions. A thick band of highly carbonaceous shale is to be found in the deep gorge to the west of Rorighāt, and a similar band, possibly the same, occurs in the low ground near Bijori (6 miles south-east of Pachmarhi). *Archegosaurus* was found in

these last named beds at a place about a mile to the south-west of Bijorī. Massive sandstones, very similar to the Pachmarī beds, are associated with all these carbonaceous beds.

The carbonaceous element appears to be confined to the central region of this horizon, where red clays are rare, and where the maximum thickness of strata is attained. Coaly matter has not been obtained.

14. The rocks of Tälcher age found in this District conform to the characters of those of the Tälcher group. They are typical areas of the group. They are greenish and pinkish earthy sandstones and fine silt-beds, with glacial boulders.

Only two exposures of these beds occur within the limits of the District. The smaller area lies about 2 miles to the west of Fatehpur and the larger one occurs immediately to the east and north-east of Hathnikhāpa. The village of Anholi is built on this larger patch. The prevailing colour of the Tälcher clay in the Anholi exposure is a dull purple.

15. Several small exposures of Vindhyan rocks are to be found in the District, *viz.*, two near Hoshangābād, several to the north of Khaparia, and two near Sontalai. These last are connected with larger areas in the Nimār District. The commonest rock in these Vindhyan beds is a hard compact fine-grained, purplish, rather thin-bedded, sandstone. In consequence of the isolated nature of these occurrences, and so far the entire absence of fossils, it is difficult to assign an exact horizon to these strata. Those near Sontalai are classed provisionally with the Upper Bhānder sandstone, and those near Hoshangābād are thought to be on the same horizon as the Rewā sandstones. Excellent flagstones and good ballast are obtained from the quarries in the exposures to the south-east of Hoshangābād. These two scarps jutting out from the alluvium of the Nerbudda are locally named the "Black rocks."

16. On the geological map accompanying this note no attempt has been made to separate the quartzites of Bijāwar age from the metamorphic granites and gneisses. It will suffice to state that a band of metamorphic rocks stretches from Handia down the bed of the Nerbudda river. A second band, about 3 miles in width, runs in an east and west direction to the north of Sontalai, and a third band runs westwards from the neighbourhood of Hardā. The country intervening between these belts of metamorphic rocks is occupied by strata of Bijāwar age; chiefly quartzites in the southern outcrops, but quartzites with well-developed limestone bands in the northern exposures.

Along the northern margin of the Gondwāna series numerous narrow outcrops of metamorphic rocks are to be met with. These often extend for long distances, as in the one which is exposed from near Bāgra to Sāli, in the vicinity of Nandarwāra. This class of outcrop is not found to the west of Lokhartalai.

Granitoid rocks are characteristic of the metamorphic series throughout this District. Two types are prevalent, *viz.*, one in which pink orthoclase in large crystals is the predominant mineral, while plagioclase felspar, in small crystals, quartz, hornblende and chlorite form the rock; and another type characterised by large orthoclase crystals with a small quantity of quartz and chlorite as its mineral constituents. Both these types are found well-foliated, but the area of transition has not been seen.

Dykes of dolerite, probably of Deccan trap age, and veins of trappéan-looking rocks traverse both the granitoid and schistose series.

In the bed of the Nerbudda river several miles upstream from Handia, rocks of syenitic character are to be met with.

Still higher up-stream, in the vicinity of Chhipāner, granitic-gneisses and schists are found, which in addition to

Metamorphic and
Crystalline rocks.

GEOLOGICAL REFERENCES

 Allison

Deccan Trap with Lamella beds

1000

Jabalpur group

Bogri beds
Dense beds

Pachmarhi beds Lower

Danuda group

Tulohir group

Windbyen Sandstones

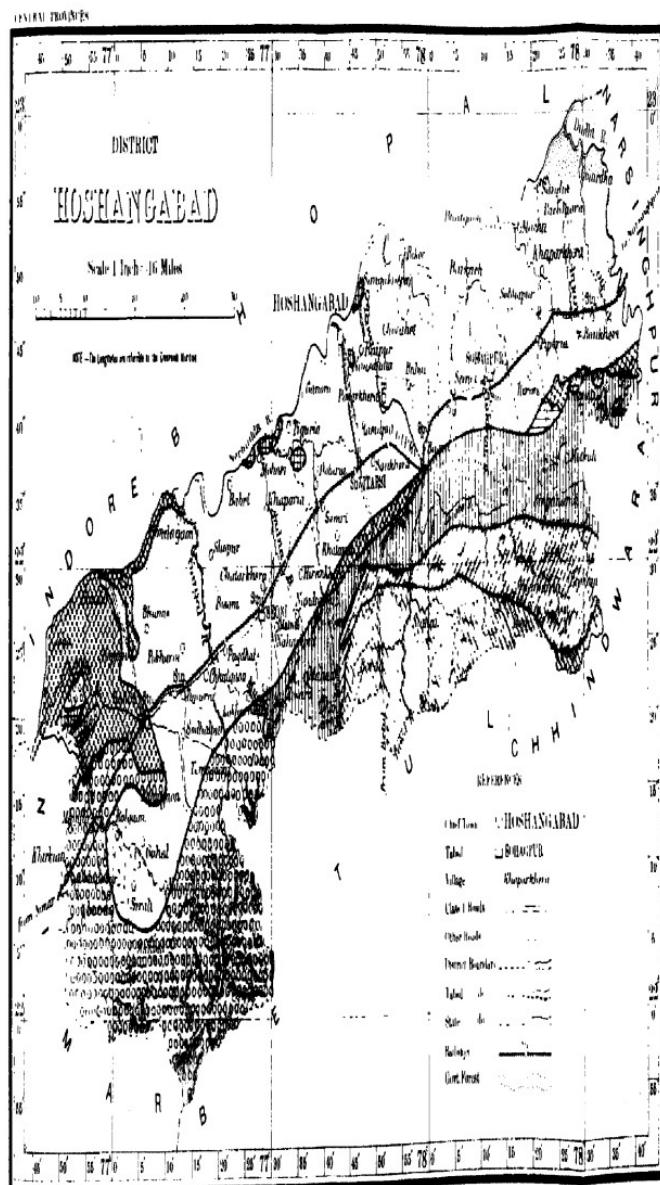
 Crystalline rocks
including Bijapur Quarries,
Bijapur Limestone and
Metamorphic Gneisses.

N. B.—Two small patches of rocks
of the Jabalpur group occur to
the E. S. E. of Bilekpur, and
form the peaks of Chaler and
Doris.

Two outcrops of Vindhyan
Sandstones are to be met with
near Hoshangabad.

A small occurrence of Metamorphic rocks may be seen at Bagraj, 3 miles E. of Patchpur.

*Near Lokhartalai well
patches of Metamorphic
rocks occur.*



Prepared especially for the Superintendent Counter Services, C.P.
from us (Loyola) prepared by him.

the minerals already enumerated, contain muscovite, augite, and sphene. These rocks are associated with amphibole (often blue-green actinolite) quartz-epidote rock, and ancient basic dykes.

17. The most characteristic rock of the Bijāwar series is a hard, compact, white quartzite. In places along the junction of the Bijāwars with the Metamorphics, the hard quartzites are replaced by soft unaltered rocks which are difficult to distinguish from sandstone; and in other places by conglomerate beds.

The quartzites roll about somewhat, but south of Handia the general dip is 5° to the S. 30° E.

The other members of the series are limestone and breccia, of which the former is usually banded with chert or hornstone.

The breccia is a very massive rock, generally with but little trace of bedding, and in colour yellow or yellow-brown. This breccia is never absent along the lines of faulting. The matrix is hornstone or jasper and fragments of milk-white quartzite are disseminated in it. In unfaulted areas the breccia alternates with the limestone, but no order of succession has been made out. Iron-ore (principally hematite) is abundant in, and appears to be confined to, the hornstone-breccia.

18. References to the strata found in the various parts of this District are given in the publications of the Geological Survey of India as under :—

- (1) The eastern and central portions of the District, Mem., Geol. Surv. Ind., Vol. X, Art. 2, pp. 133-183.
- (2) The western part of the District, Mem., Geol. Surv. Ind., Vol. VI, Art. 6, p. 163, and Vol. XXI, Art. 1, pp. 7-8 and 10-14.

BOTANY.

19. No complete flora for the District has been prepared, and such work in this direction as has hitherto been accomplished, has been almost entirely confined to forest trees or plants having some importance in forestry. The factors of various localities in the District vary more, both as regards soil and climate, than is usual in other parts of the Provinces. It is natural, therefore, to find a greater divergence of species than in more normal areas. This divergence is especially noticeable around Pachmarhi, where species not found elsewhere in the Provinces will probably be described. An outcrop of *sāl* (*Shorea robusta*) round Pachmarhi and the occurrence of the *anjan* (*Hardwickia binata*) on the lower slopes of the Mahādeo hills are the most striking botanical features of the District. Interesting also from a botanical point of view is the occurrence of *kanji* (*Pongamia glabra*), undoubtedly wild, near rivers and streams; of *champā* (*Michelia Champaca*), mango (*Citrus medica*) and *tun* (*Cedrela Toona*) wild in the valleys of the Pachmarhi hills; of *Rhus parviflora*, common at Pachmarhi and in the South Denwā forests; and of *Osyris arborea*, *Sophora interrupta*, species of *Clematis* and *Berberis*, and several other interesting plants at Pachmarhi. In other respects the flora is generally similar to that of other Districts in the northern portion of the Provinces. A list is appended, showing the species of trees, shrubs and grasses that are found. The list is by no means complete, but gives a general idea of the species and natural orders which occur. The letters in the last column show roughly the localities in which the various species appear: 'a' indicates hill tops; 'b' hill-sides and lower slopes; 'c' valleys.

PRINCIPAL TREES FOUND IN THE DISTRICT.

Order.	Tribe.	Genus.	Species.	Vernacular Name.	Remarks.
Annonaceae	Miliaceae	Saccopetalum	<i>Saccopetalum tomentosum</i>	Kakri.	
Bixaceae	Bixinae	Flaconertia	<i>Flaconertia microstachys</i>	Kakai.	
Do.	Shorea	Cochlospermum	<i>Cochlospermum Glazioui</i>	Shorea robusta	
Bombacaceae	Bombax	Kydia	<i>Kydia calycina</i>	Karai.	
Stemonidaceae	Stemonidium	Bombyx	<i>Stemonidium malabatii</i> , <i>icuanum</i>	Harianga.	(Sonderpur Borneo, South China.)
Helicteraceae	Do.	Stenocarpus	<i>Helicteres isora</i>	Samai.	
Grewiaceae	Grewia	Grewia	<i>Grewia ilicina</i>	Karli.	
Burseraceae	Bursera	Aegle	<i>Aegle marmelos</i>	Dihlorophal	
Meliaceae	Melia	Biossalla	<i>Biossalla serratifolia</i>	Bel.	
Suriaceae	Suriaria	Stomisda	<i>Stomisda sanguinea</i>	Sinalai.	
Cathartaceae	Cathartes	Chloroxylon	<i>Chloroxylon siccifolium</i>	Bohni.	
Elaeocarpaceae	Elaeocarpus	Elaeocarpus	<i>Elaeocarpus paniculata</i>	Gitya.	
Rhamnaceae	Elaeodendron	Ziziphus	<i>Ziziphus jambos</i> , <i>Roxburghii</i>	Tamangani.	
Do.	Ziziphus	Schizolobium	<i>Schizolobium julkunense</i>	Ghatbar.	
Sapindaceae	Annulidiese	Mangifera	<i>Mangifera indica</i>	Do.	
Do.	Do.	Odina	<i>Odina wynaadensis</i>	Amun.	
Hedysaraceae	Hedysarum	Sennarcarpus	<i>Sennarcarpus longiligustris</i>	Acowai.	
Vitaceae	Vitis	Ongengua	<i>Ongengua latifolia</i>	Bhilawär.	
Dioscoreaceae	Dioscorea	Clugeria	<i>Clugeria scandens</i>	Tilasaw.	
Do.	Dioscorea	Butesia	<i>Butesia frondosa</i>		
Do.	Dioscorea	Dracontium	<i>Dracontium pectinifoliatum</i>		
Do.	Dioscorea	Pterosarcus	<i>Pterosarcus pusillus</i>		
Do.	Dioscorea	Pithecellobium	<i>Pithecellobium Marapi</i>		
Do.	Dioscorea	Cassia	<i>Cassia siamea</i>	Shisham.	
Bauhiniaeae	Bauhinia	Bauhinia	<i>Bauhinia blakeana</i>	Kingi.	
Amherstiacae	Amherstia	Bauhinia	<i>Bauhinia variegata</i>	Amalata.	
Do.	Amherstia	Tamarindus	<i>Tamarindus indica</i>	Arjanan.	
Leguminosae	Do.	Acacia	<i>Acacia seyal</i>	Malakai.	
Do.	Do.	Acacia	<i>Acacia catechu</i>	Habub.	
Do.	Do.	Albizia	<i>Albizia procera</i>	Hemendia.	
Combretaceae	Combretum	Terminalia	<i>Terminalia chebula</i>	Chichola.	
Do.	Do.	Do.	<i>Terminalia oblonga</i>	Gholia.	
Do.	Do.	Anogeissus	<i>Anogeissus</i>	Kairi.	
Myrtaeae	Myrtus	Bogeria	<i>Bogeria laevigata</i>	Kayaphal.	
Lecythidaceae	Lecythis	Woodfordia	<i>Woodfordia lambardei</i>	Karhar.	
Lythraceae	Lythrum	Lagerstroemia	<i>Lagerstroemia speciosa</i>	Khatbar.	
Bombacaceae	Bombax	Adinandra	<i>Adinandra floribunda</i>	Kendoi.	
Naucleaceae	Nauclea	Stephanoxylon	<i>Stephanoxylon lanuginosum</i>	Sebaria.	
Gardneriaceae	Gardneria	Giardiana	<i>Giardiana glabra</i>	Karonda.	
Do.	Do.	Do.	<i>Giardiana glabra</i>	Hindhi (Kacura).	
Do.	Do.	Anogeissus	<i>Anogeissus</i>	Kaim.	
Do.	Do.	Bogeria	<i>Bogeria laevigata</i>	Kayaphal.	
Do.	Do.	Woodfordia	<i>Woodfordia lambardei</i>	Karhar.	
Do.	Do.	Lagerstroemia	<i>Lagerstroemia speciosa</i>	Khatbar.	
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Do.	Do.	Do.	<i>Giardiana glabra</i>	Hindhi (Kacura).	
Do.	Do.	Bogeria	<i>Bogeria laevigata</i>	Kayaphal.	
Do.	Do.	Woodfordia	<i>Woodfordia lambardei</i>	Karhar.	
Do.	Do.	Lagerstroemia	<i>Lagerstroemia speciosa</i>	Khatbar.	
Do.	Do.	Adinandra	<i>Adinandra floribunda</i>	Kendoi.	
Do.	Do.	Stephanoxylon	<i>Stephanoxylon lanuginosum</i>	Sebaria.	
Do.	Do.	Giardiana	<i>Giardiana glabra</i>	Karonda.	
Do.	Do.	Do.	<i>Giardiana glabra</i>	Hindhi (Kacura).	
Do.	Do.	Bogeria	<i>Bogeria laevigata</i>	Kayaphal.	
Do.	Do.	Woodfordia	<i>Woodfordia lambardei</i>	Karhar.	
Do.	Do.	Lagerstroemia	<i>Lagerstroemia speciosa</i>	Khatbar.	
Do.	Do.	Adinandra	<i>Adinandra floribunda</i>	Kendoi.	
Do.	Do.	Stephanoxylon	<i>Stephanoxylon lanuginosum</i>	Sebaria.	
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Do.	Do.	Do.	<i>Giardiana glabra</i>	Hindhi (Kacura).	
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Do.	Do.	Lagerstroemia	<i>Lagerstroemia speciosa</i>	Khatbar.	
Do.	Do.	Adinandra	<i>Adinandra floribunda</i>	Kendoi.	
Do.	Do.	Stephanoxylon	<i>Stephanoxylon lanuginosum</i>	Sebaria.	
Do.	Do.	Giardiana	<i>Giardiana glabra</i>	Karonda.	
Do.	Do.	Do.	<i>Giardiana glabra</i>	Hindhi (Kacura).	
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Do.	Do.	Adinandra	<i>Adinandra floribunda</i>	Kendoi.	
Do.	Do.	Stephanoxylon	<i>Stephanoxylon lanuginosum</i>	Sebaria.	
Do.	Do.	Giardiana	<i>Giardiana glabra</i>	Karonda.	
Do.	Do.	Do.	<i>Giardiana glabra</i>	Hindhi (Kacura).	
Do.	Do.	Bogeria	<i>Bogeria laevigata</i>	Kayaphal.	
Do.	Do.	Woodfordia	<i>Woodfordia lambardei</i>	Karhar.	
Do.	Do.	Lagerstroemia	<i>Lagerstroemia speciosa</i>	Khatbar.	
Do.	Do.	Adinandra	<i>Adinandra floribunda</i>	Kendoi.	
Do.	Do.	Stephanoxylon	<i>Stephanoxylon lanuginosum</i>	Sebaria.	
Do.	Do.	Giardiana	<i>Giardiana glabra</i>	Karonda.	
Do.	Do.	Do.	<i>Giardiana glabra</i>	Hindhi (Kacura).	
Do.	Do.	Bogeria	<i>Bogeria laevigata</i>	Kayaphal.	
Do.	Do.	Woodfordia	<i>Woodfordia lambardei</i>	Karhar.	
Do.	Do.	Lagerstroemia	<i>Lagerstroemia speciosa</i>	Khatbar.	
Do.	Do.	Adinandra	<i>Adinandra floribunda</i>	Kendoi.	
Do.	Do.	Stephanoxylon	<i>Stephanoxylon lanuginosum</i>	Sebaria.	
Do.	Do.	Giardiana	<i>Giardiana glabra</i>	Karonda.	
Do.	Do.	Do.	<i>Giardiana glabra</i>	Hindhi (Kacura).	
Do.	Do.	Bogeria	<i>Bogeria laevigata</i>	Kayaphal.	
Do.	Do.	Woodfordia	<i>Woodfordia lambardei</i>	Karhar.	
Do.	Do.	Lagerstroemia	<i>Lagerstroemia speciosa</i>	Khatbar.	
Do.	Do.	Adinandra	<i>Adinandra floribunda</i>	Kendoi.	
Do.	Do.	Stephanoxylon	<i>Stephanoxylon lanuginosum</i>	Sebaria.	
Do.	Do.	Giardiana	<i>Giardiana glabra</i>	Karonda.	
Do.	Do.	Do.	<i>Giardiana glabra</i>	Hindhi (Kacura).	
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Do.	Do.	Woodfordia	<i>Woodfordia lambardei</i>	Karhar.	
Do.	Do.	Lagerstroemia	<i>Lagerstroemia speciosa</i>	Khatbar.	
Do.	Do.	Adinandra	<i>Adinandra floribunda</i>	Kendoi.	
Do.	Do.	Stephanoxylon	<i>Stephanoxylon lanuginosum</i>	Sebaria.	
Do.	Do.	Giardiana	<i>Giardiana glabra</i>	Karonda.	
Do.	Do.	Do.	<i>Giardiana glabra</i>	Hindhi (Kacura).	
Do.	Do.	Bogeria			

WILD ANIMALS AND BIRDS.

20. Nearly all the mammals found in the Provinces

Wild animals and
birds.

probably occur in the Hoshangābād District, but there are three important exceptions, namely, the elephant (*Elephas maximus*), the buffalo (*Bos bubalis*), and the swamp deer or *bārāsinghā* (*Cervus duvanceli*).

Of these, the swamp deer has probably only disappeared in recent years, a few individuals having maintained themselves until lately in the outcrop of *sāl* forest which is found in the vicinity of Pachmarhi.¹ Among important mammals the following divergences from the normal are noticeable in the District. The sāmbhar (*Cervus unicolor*) is found in average numbers, but with exceptionally fine horns, especially in the Bori forests. Chital (*Cervus axis*) are scarce; this may be accounted for by the absence of open-glade forest around a plentiful water-supply, conditions which are essential for a good head of chital. Black-buck (*Antelope cervicapra*) are exceedingly numerous in the cultivated plain between the hills and the Nerbudda; their horns not infrequently attain a length of 24 inches and sometimes even of 26 inches, which is considerably above the average for the Provinces. A few herds of bison (*Bos gaurus*) exist in the hills west of Pachmarhi. Wild pig (*Sus cristatus*) are exceptionally numerous. Wolves (*Canis pallipes*), although not common, occur more frequently than in most Districts of the Provinces. Tigers (*Felis tigris*) were once numerous, but have been much reduced in recent years. The Sohāg-pur jungles have on more than one occasion been selected as a shooting camp for royal visitors. Leopards (*Felis pardus*) are exceedingly common; and all the smaller felidæ characteristic of the Provinces are very numerous. The Indian sloth bear (*Melursus ursinus*) is common, especially in the Mālni tract. Boi-reech (*Mellivora indica*) and otters (*Lutra*

¹ See the 'Highlands of Central India' by Captain J. Forsyth, Chapter III.

vulgaris) are found on the banks of many streams. The large Indian squirrel (*Sciurus indicus*) can frequently be seen in the forests around Pachmarhi and Borī. The District is generally poor in birds, especially game birds. Owing to the absence of tanks, few wild fowl are obtained, but geese (*Anser albifrons*) and cranes (*Grus antigone*) are found in numbers in the lower Tawā valley, and along the Nerbudda. Pea-fowl (*Pavo cristatus*) are very common in the forests and both species of the jungle fowl (*Gallus ferrugineus* and *Gallus sonnerati*) are found. Rare species occur in the vicinity of Pachmarhi, amongst which may be mentioned the racquet-tailed drongo. The fauna of the *sāl* forests around Pachmarhi afford a most interesting study in the distribution of species. The occurrence of the *sāl* tree, which has its peculiar fauna, combines with the elevation of the plateau to produce conditions which are different from those of any other area in the Provinces, and species occur which are strictly foreign to this part of India. Himālayan species, either identical or in a modified form, are found, which in some cases are again reproduced in the hills of Southern India. This recurrence of species is specially noticeable amongst insects. No fauna of the Pachmarhi plateau has yet been compiled; but some information on the subject will be found in Chapter III of Captain J. Forsyth's 'Highlands of Central India.'

21. During the sixteen years ending 1906, a total of
 Deaths from wild animals. 21 persons were killed annually by wild animals on an average, and 36 died from snake-bite. Out of those killed by wild animals, the deaths of 8 were caused by tigers, of 4 by panthers and of 4 by bears. The average number of head of cattle killed annually during the same period was 241, of which tigers accounted for 57 and panthers for 164. The average number of wild animals killed annually was 10 tigers, 30 panthers, 6 bears and 6 wolves.

RAINFALL AND CLIMATE.

22. Rainfall is registered at each of the tahsil headquarters and at Pachmarhi. A new Raingauge station was also established in

September 1905 at Makrai, the chief town of the Makrai Feudatory State. The average rainfall for the whole District during the 39 years ending 1905-06 is returned by the Irrigation Department as 47 inches. This figure does not include Pachmarhi, where owing to the greater elevation the fall is much heavier, averaging 77 inches annually. During these 39 years the fall has on only three occasions been less than 30 inches, the minimum being 26 inches in 1899-1900. The maximum fall during the same period was $74\frac{1}{2}$ inches in 1867-68. From the figures available during the 33 years preceding 1899-1900, it appears that the average rainfall during the five months from June to October is about 46 inches, while for the remaining seven months it is less than 2 inches. For the five wet months the average monthly fall is approximately $7\frac{1}{2}$ inches in June, $14\frac{1}{2}$ inches in July, 13 inches in August, $9\frac{1}{2}$ inches in September, and $1\frac{1}{2}$ inches in October. The rains usually begin rather late, but are heavy and continuous. Sometimes from the middle of June to the end of August there is not a single break of any duration. The characteristics of the fall, however, vary in different tahsils. For instance, in Hardā light showers at the commencement of the monsoon are often followed by heavy rain in September, which allows the land to be carefully prepared in good time, while the seed is sown in a thoroughly saturated bed. The rainfall during the wet months is usually more than sufficient for the agriculture of the District, and is almost always supplemented by further showers in the cold weather, which are heaviest, though most uncertain, in the Sohāgpur tahsil. There is indeed a proverb that the country, being under the special protection of Mahādeo, may suffer from floods or too much rain, but never from drought. And in fact history shows that though the prosperity of the

District depends on a single crop of wheat grown on unirrigated land, yet, with the exception of the two great famines of 1897 and 1900, failure from lack of rain is almost unknown. Damage is far more frequently inflicted by excessive rain, often accompanied by heavy hailstorms, in the cold weather.

23. There are two observatories in the District, one at Hoshangābād and the other at Pachmarhi. Both were established in 1870. The elevation of the present building at Hoshangābād is 1006 feet above the sea, while the Pachmarhi observatory is situated at an altitude of 3528 feet. The average maximum and minimum temperatures, and the absolute maximum and minimum recorded at these two observatories for the months of January, May and July are :—

	Average maxi-mum.	Average mini-mum.	Absolute maxi-mum.	Absolute mini-mum.				
	Hoshangābād.	Pachmarhi.	Hoshangābād.	Pachmarhi.	Hoshangābād.	Pachmarhi.	Hoshangābād.	Pachmarhi.
January	80.3°	71.3°	52.3°	47.5°	91°	82°	40° ¹	30.3°
May	107.6°	95.1°	80.3°	75.1°	117.1°	103.7°	60.5°	60.7°
July	86.7°	75.8°	75.2°	68°	106.4°	92.7°	70°	63.4°

The highest temperature recorded at Hoshangābād is 118.5° on 1st June 1889, and at Pachmarhi 104.7° on 2nd June 1889, while the lowest is 39.1° on 12th December 1879 at Hoshangābād and 30° on 24th December 1878 at Pachmarhi. It will thus be seen that the temperature of the Pachmarhi Sanitarium is roughly some 10° less than that of the plain which it overlooks.

¹ The Director-General of Observatories says that the record occurred in 1878 and many years since then the difference between absolute minimum temperatures of the year for Pachmarhi and Hoshangābād has been very small.

24. The climate of the District as a whole is generally healthy, and, considering that a great part of it is not raised above the ordinary level of Indian plains, more equable than might have been expected. The cold weather, which lasts from the end of October to the end of February, is remarkable for bright, cloudless days and cool nights. Actual frost except in the hills is rare. But a bitterly cold wind blows intermittently down the valley of the Nerbudda. Its prevailing quarter is east or north-east, which is due to the circulation of the air in a clock-wise direction round the area of high pressure in the Punjab and Rājputāna. The hot weather, which begins in March and continues to the end of June, is of that intense dryness, accompanied by extreme heat, which is characteristic of the Central Provinces. But owing to the moisture, which is retained in the black soil, continually evaporating, the nights are moderately cool. Even during the hot weather too, the District, from its position as a gorge between two great mountain systems, is subject to atmospheric disturbances, and a storm is generally travelling along one range of hills or the other. Dust storms are, however, unknown. The rains are usually heavy and continuous, and the weather during breaks, though often bright and breezy in the open parts of the District, is steamy, oppressive and unhealthy wherever the valley is at all shut in. **17,834**

CHAPTER II.

HISTORY AND ARCHAEOLOGY.

HISTORY.

25. Very little is known of the early history of the

District. According to a local legend,

Local legends and
myths.

Sohāgpur is the ancient Shonitpur, the

capital of King Bānāsur, whose daughter

married Aniruddha, the grandson of Krishna. Other towns, however, lay claim to the same honour, as for instance Tezpur in Assam, where Bānāsur's fort is said to have stood on the site of the modern court-house.¹ The Pāndava brothers are locally supposed to have spent their twelve years of concealment in this District. At Sāndia Ghāt on the Nerbudda a place is pointed out where they are said to have rested and cooked food, and they are also believed to have dwelt in the rock caves at Pachmarhī. These stories, however, must probably only be taken as instances of transplanted myths, the first Hindus who settled in the valley having endowed the locality with legends of their saintly heroes; thus effecting a sort of religious annexation of the new lands, in the same manner as places in Europe are occasionally invested with legends² of the early saints or of angels.² The Sātpurā hills, with their expanse of practically untrodden forest, would at once attract the attention of a people prone to believe in the existence of divine beings in all places not tenanted by man, and inclined to magnify the attributes and importance of the spiritual residents in direct proportion to the striking and imposing aspect of the natural features of the locality. Accordingly, this range

¹ Gait's History of Assam, p. 16.

² Cf. St. Michael's mount and others.

became the abode of Siva and was named after him the Mahādeo hills. The Narmadā Khanda, or sacred descriptive poem about the Nerbudda, contains, Elliott says, many Sivite myths centering round the Mahādeo hills, which are invested with the attributes ascribed in Upper India to Kailās, the Sivite heaven.

26. A copper-plate inscription known as the Untivā-tika¹ grant records the gift of the village The Rāshtrakūta Untivātika by King Abhimanyu of the plate. Rāshtrakūta race to the temple of

Dakshina Siva belonging to Peth Pangāraka. Dr. Fleet has identified the Dakshina Siva or Southern Siva with Mahādeo's shrine at Pachmarī; Pangāraka with Pagāra, four miles from Pachmarī, and Untivātika with the village of Untia, nine miles from Sohāgpur and 30 miles from the peak of Mahādeo. The shrine is said to belong to Peth Pangāraka, and the jāgīrdār of Bāriām-Pagāra is still hereditary guardian of Mahādeo's shrine. The grant is recorded to have been made in the presence of the commander of the fort of Harivatsa-kotta, and this has been identified by Dr. Fleet with the hill of Dhūpgarh in Pachmarī. The grant is believed to belong to the seventh century, and it was made by a Rāshtrakūta king, of a dynasty located at Mānpur in the Rewah State. The Rāshtrakūtas are supposed to have been the Rāthor Rājputs, and a better-known line of kings of the same clan had their capital at Mālkhed in Hyderābād, while their territories included the south of the Central Provinces at a somewhat later period. Of the Rāshtrakūta dynasty of Rewah little or nothing is known. Dr. Fleet's identifications are distinctly conjectural, but if correct, they would show that the Sātpurā hills were colonised by the early Aryan immigrants at an earlier date than would otherwise have been thought probable

¹ *Epigraphia Indica*, Vol. VIII, page 163, and *Indian Antiquary*, Vol. XXX, p. 509.

27. Hoshangābād was certainly included in the Pramara kingdom of Mālwā or Ujjain, whose kings reigned at Dhār and flourished from the ninth to the twelfth centuries. Records of their rule remain in inscriptions found at Harsūd and Bhopāl. The latter is dated in the year 1200 A. D. and records the gift of a village named Gunaurā in the Narmadāpur *pratijāgaranaka*¹ in the Vindhya mandala by the Pramara king Udayavarman of Mālwā, after having bathed in the Narmadā at the Guadāghatta. Dr. Fleet² has identified Gunaurā with the modern Ganorā, seven miles south-west of Hoshangābād, and he thinks Narmadāpur is the ancient name of Hoshangābād. Guadāghatta is possibly represented by the modern village of Guaria on the left bank of the Narmadā, two miles west of Hoshangābād, or it may be Gwārighāt near Jubbulpore. The Harsūd inscription is dated 1218 A. D., and gives the ancient name of that place as Harshapura. It was drawn up in the reign of king Devapāldeva of the Pramara dynasty. ³The seventh and ninth kings of this dynasty rendered it famous. Rājā Munja, the seventh king (974-995), renowned for his learning and eloquence, was not only a patron of poets, but was himself a poet of no small reputation, and the anthologies include various compositions attributed to his pen. He penetrated in a career of conquest as far as the Godāvari but was finally defeated and executed there by the Chālukya king. His nephew, the famous Bhoja, ascended the throne of Dhār about 1010 A. D., and reigned gloriously for more than forty years. Like his uncle, he cultivated with equal assiduity the arts of peace and war. Though his fights with neighbouring powers including one of the Muhammadan armies of Mahmūd of Ghaznī are now forgotten, his fame as an enlightened patron of learning

¹ My Assistant Mr. Hira Lāl considers this word to mean the equivalent of the *chauki* in Native States or our police outpost.

² Indian Antiquary, Vol. XVI, p. 253.

³ Smith's Early History of India, p. 316.

' and a skilled author remains undimmed, and his name has become proverbial as that of the model king according to the Hindu standard. Works on astronomy, architecture, the art of poetry and other subjects are credibly attributed to him. The great Bhojpur lake, a beautiful sheet of water to the south-east of Bhopāl, covering an area of two hundred and fifty square miles, formed by massive embankments closing the outlets in a circle of hills, was his noblest monument, and continued to testify to the skill of his engineers until the fifteenth century, when the dam was cut by order of a Muhammadan king, and the water drained off. The bed of the lake is now a fertile plain intersected by the Indian Midland Railway.'¹ About 1053 A. D., Bhoja was attacked and defeated by the confederate kings of Gujarāt and Chedi, and the Ponwār kingdom was reduced to a petty local dynasty until the 13th century; it was finally superseded by the chiefs of the Tomar and Chauhān clans, who in their turn succumbed to the Muhammadans in 1401.

28. The town of Hoshangābād is believed to take its name from Sultān Hoshang Shāh Ghori,

The Muhammadan Ghori kings of Mālwā. the second of the Mālwā kings, who began his reign in 1405. He made several ex-

peditions against the Gond kingdom of Kherlā in Betūl, and in 1433 slew Narsing Rai, Rājā of Kherlā, in battle and annexed his territories by treaty with the Bahmani king of Berār. Soon after this event Hoshang Shāh is said to have died at Hoshangābād, where he had built a fort on the bank of the Nerbudda as a base of operations against Kherlā and the Bahmani kings. He was buried, however, at his capital of Māndu. A *dargāh* or tomb was erected to him at Hoshangābād and another at Bāgra which is said to have been built over two fingers which he lost in an attack on the fort. In his invasions of Betūl, Hoshang Shāh apparently took the route through Hardā, and a number of Hindus from Mālwā settled in the Hardā tahsil and the Betūl District, where the

¹ Smith's Early History of India, pp. 316, 317.

Mālwā dialect is still spoken. In the time of Hoshang Shāh and his successors Māndū is stated to have been a magnificent city with walls 37 miles in circumference, embracing an area of nearly 20 square miles. A category of the space occupied by buildings, roads, and gardens is given in Malcolm's Memoir of Central India,¹ in which it is stated that the baths covered 400 *bighas*² and the king's palaces 500. The Mālwā dynasty existed through various vicissitudes until the middle of the sixteenth century. Its army was always largely manned by Rājputs, and in 1512 dissensions broke out between these and the Muhammadans. The Rājputs seized Māndū, which was besieged by the Mālwā king with the help of an army from Gujarāt, and taken by storm ; 19,000 Rājputs, including those who sacrificed themselves rather than survive defeat, are stated to have fallen on this memorable occasion.³ Under the next king but one to Hoshang Shāh, in 1440, the Mālwā kingdom is described as including the cities of Chanderī, Islāmabād, Hoshangābād and Kherlā ; it extended on the south to the Sātpurā range, on the west to the frontier of Gujarāt, on the east to Bundelkhand, and on the north to Mewār and Harautī.

29. Mālwā was conquered and incorporated as a province of the Mughal empire in 1567 and The Mughal empire. the imperial authority extended over the western part of Hoshangābād. The whole District appears to have been nominally included in Sūbah Mālwā ; Garhā, near Jubbulpore, is mentioned in the Ain-i-Akbarī as one of the Mahāls in Sarkār Kanauj of Sūbah Mālwā, and Handia was an important Sarkār in the same Sūbah. In all the expeditions to the Deccan under the Mughals, the route appears to have lain through Handia and Burhānpur. Handia Sarkār had 22 Mahāls, among the names of which

¹ Vol. I, p. 41.

² The *bigha* was an area of 60 yards square or about three-fourths of an acre.

³ Malcolm I, p. 37.

may be recognised Seoni, Hardā, Handia and Bichholā. Hoshangābād itself was not a Sarkār or Mahāl, but is mentioned as one of the places within Sūbah Mālwā in which wild elephants were found.¹ In the letters of the Faujdār of Handia towards the end of Aurangzeb's reign, Hoshangābād and Seoni are mentioned as places under his care, which he found it difficult to preserve against the Rājās of Saoligarh and Gannore, bent on plunder and devastation. It would appear that in this part of the country, the Mughal hold was somewhat a loose one, and the petty local and tribal Rājās conducted themselves almost independently, the Mughals not considering them much worth their attention, though occasionally chastising them as in the case of Rānī Durgāvati of Garhā-Mandlā.² What was the actual state of affairs in Hoshangābād during the Mughal period, cannot be exactly stated, but in the early part of the 18th century the position of affairs was somewhat as follows. The Rājwāra pargana was held by four Rājās, feudatories of Mandlā. Sohāgpur was subject to the Rājā of Deogarh, whose officer managed its affairs from Turon. Bābai was called Haveli Bāgra and belonged to the Rājā of that fort, while Hoshangābād itself and the neighbouring *tālukas* were subject to the Rājā of Gannore. The Saoligarh Rājā ruled over as much of Seoni and Hardā as was commanded by his mountain fort; and a subordinate officer of his lived at Rahatgaon. The rest of Seoni and the northern part of Hardā were under the Muhammadan Faujdār of Handia so long as there was a Faujdār. The Rājā of Makrai held the greatest part of what is now the Chārwa pargana and lived at Kālibhit.

30. At the commencement of the 18th century Dost

Conquests of Bhopāl and the Peshwā. Muhammad, the founder of the Bhopāl family, appeared in Hoshangābād. Taking advantage of the rivalry of the local

¹ Jarrett's *Ain-i-Akbari*, Vol. I, p. 122.

² The remainder of this chapter is practically reproduced from Mr. (Sir C.) Elliott's Settlement Report.

Rājās of Gannore and Bairī, he intervened on the side of the former and subsequently dispossessed both. He held the fort of Hoshangābād and some neighbouring territory and also Seoni for a time; and a grant made by him to some Rājput families is recorded by Elliott. In 1742 the Peshwā, Bālāji Bāji Rao, marched up the Nerbudda valley from Burhanpur to attack Mandlā. West of the Ganjāl he took permanent possession of the country, finally displacing the Muhammadan governor of Handia. He left two brothers, Chitpāwan or Konkanasth Brāhmans, in charge of the country, and these were the founders of the Bhuskute family. They speedily picked a quarrel with the Rājā of Makrai and, as he was unable to make any resistance, forced him to sign a treaty in 1750, giving up half his territory which at that time comprised according to the document 62 villages.

31. This is the first appearance of the Makrai State in history, as it is not mentioned in the The Rājā of Makrai. Ain-i-Akbarī. It was, Elliott states, a cardinal point of faith with the Rājā in his time that his ancestors held from the Tāpti to the Nerbudda and from the Ganjāl to the Chhotā Tawā, or the whole of the old Hardā tāhsil. But the fact seems to have been that during the Mughal rule he was an insignificant hill chief with his headquarters at Kālibhīt. Later on when the Muhammadan power was weakened by the Marāthā incursions, Rājā Makrand Shāh came down from his distant hill abode, and built Makrai on the crest of the northernmost spur of hills, overlooking the Hardā plain, from which he presently managed to annex some fifty villages, worth far more than the whole of his original estate. The battle of Pānipat in 1761 shook the Marāthā power everywhere; and the Makrai Rājā sought to improve the occasion by driving their Amil or local officer out of Handia, but he was repelled and killed by a force of Gosains. In 1765 a pretext was found for seizing the remaining half of his jāgir, because the Rājā failed to present himself when Raghunāth Rao, the Peshwā's brother,

passed through Handia on his first expedition to Hindustān after the battle of Pānipat. But on his subsequently appearing and being very penitent, the tract which now forms the Makrai State was restored to him, being about an eighth of his original territory. Later on, after 1803, the remnant of the estate was again in danger when Rājā Udai Shā in a fit of drunkenness murdered a Brāhmaṇ, and on this Daulat Rao Sindhia annexed Makrai and held it for about three years ; but its restoration was obtained by the Rājā's Diwān with the aid of judicious bribes, Udai Shā, the slayer of the Brāhmaṇ, being however set aside with a pension, while Devi Shā who held at the 30 years' settlement was placed on the *gaddī*. After the cession he fell into great disgrace for putting a Gond to death for sorcery ; but his Diwān only was removed and banished.

32. The Bhuskute brothers rendered good service to the Peshwā by keeping the country undisturbed, and by settling cultivators from Khāndesh in the uninhabited parts. In

The Bhuskute family. reward for this they received in 1751 the hereditary offices of Sir Mandloi and Sir Kānungs, with villages and tracts of land rent-free, percentages on the revenue and rights of taxation. In 1777 the Peshwā, Mādho Rao, gave them the village and fort of Timarni as a permanent grant. Daulat Rao Sindhia subsequently added two villages, and they obtained three from the Makrai Rājā, this estate being held up to the 30 years' settlement on a sort of *zamindāri* tenure.

33. Meanwhile the Bhonslas, established in Berār, had been busily employed in over-
Conquests of the Bhonslas and war with Bhopāl. running the Sātpurā hills ; and between 1740 and 1775 by gradual conquest and encroachment, they obtained military possession of the whole District, east of the Ganjāl, except the tract which had already been conquered by Bhopāl. The Fatehpur Rājās held a deed from the Rājā of Nāgpur dated in 1775, in which he promised to maintain their *jāgir* and *izzat* just as the

Mandlā Rājā had. This is Elliott's statement, but according to the Nāgpur history of the house, they did not obtain regular possession of the Nerbudda valley till 1796. In 1795 hostilities broke out between Nāgpur and the Bhopāl State. The Marāthā Sūbahdār of Bhanwargarh in Betūl was one Benī Singh, ancestor of the Bordhā family. He marched against Hoshangābād which was held by a Bhopāl garrison, and after a siege of two or three months the fort was evacuated, when Benī Singh, leaving a Marāthā force to hold it, returned to Bhanwargarh. 17,834

34. About this time Wazīr Muhammād became Diwān of Bhopāl and soon gained for himself

Wazīr Muhammād
of Bhopāl.

a high military prestige. In 1802 he formed a party within the fort of

Hoshangābād and encamped with his army opposite to it on the northern side of the river. His partisans in the fort worked on the feelings of the governor, Rāmāji Banchor, who was not a man of war, till he evacuated the place, and Wazīr Muhammād marched in without resistance. This recovery of ancient dominion added very highly to his reputation as a successful leader, which was now at its zenith ; and old men professed to remember him and his famous crop-tailed horse, even in Sir C. Elliott's time. One of the verses current in his praises which Elliott quotes, was as follows :—‘The Deccan, Berār, ‘Gujarāt, and Mālwā, Gondwāna and Telingāna have heard ‘the sound of his spear ; as far as the twelve Districts of Mala- ‘bar, Cuttack, the Calcutta ghāt, Portugal, Assam and Nepāl. ‘To Delhi, Lahore, Multān, Mārwār, Sind and Sūrat has shone ‘the reputation of the good protecting shepherd of the land of ‘Bhopāl, Wazīr Muhammād; the rider on the crop-tailed ‘horse.’ The name Portugal in the above verse probably refers to Goa, and it is worth reproducing for its picturesquely untrammelled exaggeration. Wazīr Muhammād at once overran and took Seoni, and in 1804 made an attack on Sohāgpur. The strong little fort was, however, manfully defended for several days, till assistance came from Sakhārām

OLD FORT, HOSHANGABAD.

B. M. S., Calcutta, P. 1933.



Bāpu of Gādarwāra. Wazīr Muhammad attacked the relieving force in the plain east of Sohāgpur, near Gondrai, but was defeated and driven headlong back to Hoshangābād, Sakhārām Bāpu not giving him any time for repose. On reaching the outskirts of the town he turned on his pursuers in order to enable the fugitives to enter the fort safely. His efforts were, however, of no avail and his horse Hansrāj¹ was killed under him in charge. He managed to mount his celebrated crop-tailed horse Pankhrāj ; but he was by this time separated from his friends and escaped with difficulty by leaping his horse over the ditch and parapet of the fort. Sakhārām then turned back and made no attempt to take it.

35. In 1805 the sullen-tempered Sindhia passed up the valley from Burhānpur, where he had been nursing his wrath after the defeat of Assāye in 1802, till Jaswant Rao Holkar's successes against Monson encouraged him to think that there was balm in Gilead, and the English were not invincible after all. He took Seoni from Wazir Muhammad's Amil, and was with great difficulty prevented from attacking Hoshangābād to punish the Nawāb for his English alliance. He was still, however, too cowed to venture on this and passed on to Saugor. Mr. Webbe, the Resident at his court, died at Dolaria on this march. Sindhia held Seoni for three years and then restored it to Nāgpur. In 1808 Ganpat Rao, who was stationed with a Nāgpur force at Shāhpur in the Betūl District, heard a report that part of the Hoshangābād fort had been washed away in the rains and made a rapid march against it, but failed to take it by surprise. He then erected batteries against it, and after the rains were over, crossed to the north side of the river and cut off its communications with Bhopāl. After

¹ The horse was buried outside the town, near the old Commissioner's bungalow, and a rude stone image of it was made, which is still revered by the people. The image is just in front of the Club.

a six months' siege the garrison capitulated and were allowed to march out with their property, and this was the last of Bhopāl dominion south of the Nerbudda. From this time the District, with the exception of Hardā, formed part of the Bhonsla kingdom of Nāgpur. The Hardā-Handia tract, forming the old Hardā tashil, had been made over by the Peshwā to Sindhia, probably in 1778 when the latter also obtained Nimār. Hardā was burnt by Jaswant Rao Holkar in 1801. During the subsequent period prior to the general pacification, the people suffered much both from the Pindāris and from the Muāsi Korkūs of the Bairī hills, who, in this time of license and rapine, showed an amount of daring and a thirst for plunder, which made them the dread of all the surrounding Districts. They instituted a regular system of black-mail called Tankā Muāsi, which the Hardā villagers were only too glad to pay to escape from being plundered; it was at first taken in grain and afterwards commuted to money.

36. From the time when Wazir Muhammad was taken

Period of Pindāri
raids.

back from Sohāgpur in 1804, is dated the commencement of that terrible period of

disturbance and distress, the '*Gardi kā waki*' or the Pindāri raids.

It began with the great famine of 1803, by which a great extent of country was depopulated; the year was still remembered sixty years afterwards as that when the bamboo seeded. This was followed by the devastations caused by the Pindāris, who were first called in by Wazir Muhammad; they soon left him and took the Nāgpur side but plundered impartially in all directions. The country which suffered most from them was the Sohāgpur pargana, which was the seat of war between Nāgpur and Bhopāl, and was so entirely deserted that when we retook it not more than three or four villages in the Bābai tract were inhabited, and in the vast majority of cases the old patels and cultivators had utterly disappeared. But though this area suffered most, no part of the District escaped; there was probably not a single village which was not burnt once or twice in

the fifteen years from 1803 to 1818, and most of the small ones were deserted, the people crowding together for mutual protection under such forts as those of Sohāgpur, Seoni and Timarnī. The unfortunate country people, Grant wrote,¹ gave up all attempt at protecting themselves against the troops, whether hostile or nominally friendly, and when they heard of an army coming, hid themselves in the glens and rocks, creeping out by moonlight in a last desperate attempt to cultivate their land. But even if they tided through these greater catastrophes there was the never-absent danger of predatory inroads from the hill-tribes, or indeed from anyone who was strong enough to get up a following. To avoid these they clubbed together and paid blackmail, or collected themselves into large villages and built mud fortifications round them, going out armed to their fields many miles off perhaps, and leaving wide tracts of country, in their own expressive phrase, ‘*be chirāgh*’ without a light or village fire. If the crops thus sown in sorrow and tended in fear came to maturity, there were fresh trials to encounter. Sometimes the lease taken at the beginning of the year and carried through with so much difficulty and anxiety, was unceremoniously set aside in favour of a higher bidder, and the unfortunate lessee saw the harvest, on which he had staked his all, go to enrich some private enemy or clever speculator. Sometimes the village would be made over by those in authority to troops in arrears to pay themselves, no questions of course being asked. Sometimes the crop was seized directly by the Government officials without any pretence of form or reason. Before the Pindāri raids began in 1804 it appears from the scanty accounts which remain that the revenue was as large as that taken at the 30 years’ settlement, and the country almost as populous as in 1870. All accounts agree in stating that when we took it over in 1818 the villages

¹ C. P. Gazetteer, 1870, Introduction, page xcvi.

were few and far between and the cultivation round them was but a scanty oasis in the middle of the jungle.

37. The Pindāris whose names are best known are

The Pindāris.

Chītu and Karīm Khān. Chītu received from Sindhia some territory on the north

side of the Nerbudda as well as the Jalodā pargana, and made Chhipāner his headquarters for a long time. One or two grants to him under the designation of Nawāb Mustafā Jang Chītu, were seen by Ellioott, and Umeid Kunwar, a follower of his, annexed Makrai for three years ousting the Rājā, and when he gave it back for a bribe carried off a great gun from the fort and left it at Jalodā. Other bands lived in Bairī and crossed the Nerbudda to plunder Rājwāra at their ease. A small party made Raisalpur their headquarters for a long time. There were numberless bodies of these ruffians and they went on increasing constantly, cultivators who were hopelessly ruined often joining them, and children growing up whom they had carried off and circumcised by force. Several villages have stories of gallant and successful resistance to their attacks ; but generally they were too sudden and too much dreaded to be opposed. Malcolm gives the following description of the Pindāris¹ :—

' The Pindāris were neither encumbered by tents nor baggage ; each horseman carried a few cakes of bread for his own subsistence, and some feeds of grain for his horse. ' The party, which usually consisted of two or three thousand ' good horses, with a proportion of mounted followers, ' advanced at the rapid rate of forty or fifty miles a day, ' neither turning to the right nor left till they arrived at their ' place of destination. They then divided and made a sweep ' of all the cattle and property they could find ; committing ' at the same time the most horrid atrocities and destroying ' what they could not carry away. Their chief strength lay ' in their being intangible. If pursued, they made marches

¹ Memoir of Central India.

'of extraordinary length (sometimes upwards of sixty miles), 'by roads almost impracticable for regular troops. If 'overtaken, they dispersed, and reassembled at an appointed 'rendezvous; if followed to the country from which they 'issued, they broke into small parties. Their wealth, their 'booty, and their families, were scattered over a wide region, 'in which they found protection amid the mountains and in 'the fortresses belonging to themselves and to those with 'whom they were either openly or secretly connected; but 'nowhere did they present any point of attack; and the 'defeat of a party, the destruction of one of their canton- 'ments, or the temporary occupation of some of their strong- 'holds, produced no effect, beyond the ruin of an individual 'freebooter, whose place was instantly supplied by another, 'generally of more desperate fortune, and therefore more 'eager for enterprise.'

'The return of the Pindāris from an expedition presented 'at one view their character and habits. When they recrossed 'the Nerbudda and reached their homes, their camp became 'like a fair. After the claims of the chief (whose right was a 'fourth part of the booty, but who generally compounded 'for one or two valuable articles) had been satisfied, the 'usual share paid to their Lubhuri, or chosen leader for the 'expedition and all debts to merchants and others who had 'made advances discharged, the plunder of each man was 'exposed for sale; traders from every part came to make 'cheap bargains; and while the women were busy in dispos- 'sing of their husbands' property, the men, who were on such 'occasions certain of visits from all their friends, were 'engaged in hearing music, seeing dancers and drolls and in 'drinking. This life of debauchery and excess lasted till all 'their money was gone; they were then compelled to look for 'new scenes of rapine, or, if the season was unfavourable, 'were supported by their chiefs, or by loans at high interest, 'from merchants resident in their camps, many of whom 'amassed large fortunes.'

38. The first English force which visited Hoshangābād was that of General Goddard in his famous march through India in 1799, which laid the foundation of the Bhopāl alliance. In 1817 the station was occupied by a force under Colonel Adams, in connection with the operations against the Pindāris and Appa Sāhib, the fugitive ex-Rājā of Nāgpur, who had taken refuge in the Mahādeo hills. In January 1818 the civil officers of the British Government took possession of the District in accordance with the provisional agreement made by Appa Sāhib for its cession. In the summer of this year a party of Arabs in the pay of Appa Sāhib was attacked and dispersed at Fatehpur. A cavalry regiment was posted at Handia and afterwards at Chārwa in connection with the operations against the Peshwā Bāji Rao, who however surrendered in Nimār without fighting.

39. In 1820 the districts ceded by Appa Sāhib and the Peshwā were consolidated under the title of the Saugor and Nerbudda territories and placed under an Agent to the Governor-General residing at Jubbulpore. Hoshangābād at this time included the territory from Sohāgpur to the Ganjāl river, Hardā-Handia remaining with Sindhia. The Rājwāra pargana was at first attached to Narsinghpur and the Dudhi became the eastern boundary in 1827. In 1835 Narsinghpur, Betūl and Hoshangābād were incorporated into one District with headquarters at Hoshangābād and assistants at the out-stations. In 1843 they were again separated and made into three districts as before, with the boundaries which existed until the recent transfers to Nimār. From 1835 till 1843 and again from 1853 till 1861 the Districts formed part of the North-West Provinces. The officers in charge of Districts were at first called Assistants to the Agent, and their designation was changed to Deputy Commissioner in 1843.

Early British administration.

40. In 1844 the Hardā-Handia tract was made over by Sindhia as part of the territory assigned for the support of the Gwalior contingent, and was attached to Hoshangābād, being finally ceded in 1860.

Acquisition of Hardā.

41. The inhabitants of the District had very little sympathy with the great centres of disaffection and excitement in 1857, and as the town was occupied by a wing of the 28th Madras Infantry and no large body of rebels or mutineers came anywhere near it, the year passed over with very little disturbance. What trouble there was, was confined to the Hardā pargana. Lieutenant J. C. Wood was Deputy Commissioner of the District. In the beginning of July a plot was discovered to rob the Hardā tahsili, but it was defeated by the good conduct of the Deputy Magistrate, Maulvi Mazhar-ul-Jamil, and the treasure was safely conveyed into Hoshangābād. The police subsequently broke out into open mutiny and attempted to raise the Muhammadan standard; but they were not actively supported by any large section of the people, and the Deputy Magistrate showing a bold front and being seen approaching with a band of chuprāssies and others, with the avowed intention of fighting to prevent the standard being raised, the police became frightened and ran away to Nimāwar, where disturbances continued for some time. Eventually several of them were hanged and transported. The Deputy Magistrate, Maulvi Mazhar-ul-Jamil, was reported to have saved the Hardā pargana from revolt, and he was admirably seconded by his son, Hifz-ul-Kabir, a young man of 25. In reward for their gallant conduct the family received the important Māla estate in Damoh. Maulvi Mazhar-ul-Mahmūd of the Sohāgpur tahsil is the grandson of Mazhar-ul-Jamil. In the eastern part of the District some dacoities were committed, but Mr. Thornton, Deputy Collector of Survey, went to Sohāgpur and by his influence induced the Rājās of Rājwāra to put them down. Fugitives from

The Mutiny.

Indore and Sihore arrived in Hoshangābād in August. In September a Marāthā Pandit professing to be an Agent of Sindhia raised the standard of rebellion in the Nimāwar pargana and drove the police out of Nimāwar. On this Lieutenant Wood marched from Hoshangābād to attack them with a small party of the 28th Native Infantry and two guns, and on reaching Handia was fired on by the rebels from the opposite bank of the river. But the police, crossing over under the fire of the guns, were strong enough to drive out the rebels and capture their leader who was presently hanged. After this the Mewātis of Satwāns, in Nimāwar, gave a little more trouble, but were put down at once. Several dacoities were committed in Chārwa by criminals protected by the Rājā of Makrai, and the Rājā himself was said to be meditating the annexation of the Chārwa pargana, but no charge was ever pressed against him.

42. In November 1858, Tantia Topi crossed the Ner-

Raids of Tantia
Topi and others. budda at the Sāndia ghāt and made his way into the hills past Fatehpur, where he halted for a night. The Rājās were

accused of having given him supplies and guides, and fell into sad disgrace for a long time. An investigation was made, but nothing proved against them.

In April 1859, a Bhopāl rebel, named Nawāb Adil Muhammad Khān, of Ambāpāni, made an inroad into the District but was driven out by the police. Bhabhūt Singh, Jāgirdār of Harrākot in the Mahādeo hills, a Muāsi Korkū, is said to have assisted and sympathised with him. He had nursed a spirit of disaffection for some time, and at last was driven to open rebellion in July 1859, by the oppression of a Thānadār, who demanded from him a fowl, or fowls, without any suggestion of payment. Absurd as a little isolated rebellion by such an insignificant creature seems, he gave some trouble, partly through the mysterious dread of the hills which all residents of the valley entertain, and partly through the help of the Fatehpur and Sobhāpur Rājās, who

are believed to have befriended him. A detachment of Madras Infantry and Military Police marching against him in August 1859, were met by him in a small pass near the Denwā river, and repulsed with some loss. At length, on severe pressure being put on the Rājās, who were removed from Fatehpur and refused interviews, they bestirred themselves and easily caught Bhabhūt Singh and his chief subordinate Holi Bhoi in January 1860. The only notable event since that date is the career of Tantia Bhil between 1876 and 1890. The depredations of this famous dacoit were generally confined to the Chārwa tract, and a notice of him is given in the Nimār District Gazetteer.¹

ARCHÆOLOGY.

43. The District has few old remains. The only thing in the valley which can boast of any real Archaeology. antiquity is the rock-cut cave of Tilok-sendur near Zamāni or Khatāma. It consists of a plain rectangular room in the end of which stands an enclosed shrine having a *pradakshinā* or path round it and between it and the wall of the cave. In front of the shrine supporting the forward part of the cave are four columns. The shrine is sacred to Mahādeo and there is said to be a passage leading from it to the cave of Jambudwīp near Pachmarhi. The story related about the cave is that Mahādeo excavated it in order to hide himself from the pursuit of Bhasmāsur, a demon to whom he had granted in a moment of rash generosity the power of reducing to ashes everything on which he should lay his hand. Bhasmāsur, intent on destroying Mahādeo, finally tracked him to the cave of Tilok-sendur, from which Mahādeo fled through the rock to Jambudwīp, the rock opening of itself to allow him a passage. As the giant was preparing to follow, Vishnu appeared in the guise of a beautiful maiden, and cajoled him so that the giant forgot Mahādeo in his desire to possess her. Vishnu as the

¹ Para. 55.

maiden danced before him, holding her hand over her head and asked the demon to dance with her. He did so, and in a forgetful moment placing his hand on his head was at once reduced to ashes. In memory of this an annual festival is held here. In a hill in the station of Pachmarī are five small cave temples, which the people suppose to have been one of the places of sojourn of the five Pāndava brothers during their wanderings. The name Pachmarī is a corruption of *panch mathi* or five huts. The caves have been supposed to be of Buddhist origin, but there is nothing about them to indicate with any degree of certainty to what religion they belonged. Remains of forts exist at Bāgra, Jogā, Chārwa, Handia, Hoshangābād and Sohāgpur. Of these, Jogā fort is in a fair state of preservation and is a picturesque building, situated on an island in the Nerbudda. At Jogā are the tombs of two Muhammadan generals who commanded the fort. Some statues have been found at different places, the most important being that of Pārsanāth canopied by the hooded snake at Sankherā and the colossal statue at Sohāgpur.

Bimoste, Collo, Dist.

THE FIVE CAVES, PACHMARI.



CHAPTER III.

POPULATION.

STATISTICS OF POPULATION.¹

44. The area of the District in 1901 was 4020 square

Statistics of area,
population and den-
sity. miles, and the population 449,165 persons. In 1904 the Kālibhīt tract, consisting of 38 villages, with an area of 51

square miles and a population of 2580 persons, and 293 square miles of Government reserved forest, was transferred from the Hardā tahsīl to Nimār. The present area of the District is thus 3676 square miles, and its population 446,585. Hoshangābād stands sixteenth amongst the twenty-two Districts of the Central Provinces and Berār in area, and thirteenth in population. It is divided into four tahsils, which, proceeding from east to west, are named Sohāgpur, Hoshangābād, Seoni and Hardā. The area and population of these tahsils are as follows :—

	Area in sq. miles.	Population.
Sohāgpur	... 1,243	... 125,863
Hoshangābād	... 804	... 125,071
Seoni	... 490	... 66,793
Hardā	... 1,139	... 128,858

The density of population for the whole District is 121 persons to the square mile, while the average for the British Districts of the Central Provinces and Berār is 120. In the rural area the density is 107 persons to the square mile. Excluding Government forest, the density is 162 to the square mile for the whole District, and 142 to the square mile for the rural area. Hoshangābād is the most thickly populated tahsīl, with 156 persons to the square mile, and Sohāgpur,

¹ The figures given in this Section do not include Makrai.

the most sparsely inhabited, with 101 persons to the square mile. In the Seoni and Hardā tahsils the population is 136 and 113 persons to the square mile respectively. These variations are generally due to the inclusion in each tahsil of a larger or smaller proportion of the thinly peopled hill-tracts of the Sātpurās. In the valley proper the density of the population, which averages 145 persons to the square mile, is much more constant. The most thickly populated part of the District is the Hoshangābād Station-house area with 221 persons to the square mile, while Handia Station-house area with 98 persons to the square mile is the most thinly populated.

45. According to the census returns of 1901, the District then contained 6 towns and 1334 inhabited Towns and villages. The village lists prepared for the District show 1579 towns and villages, of which, 206 were uninhabited. From these figures must now be deducted the 38 villages of the Kālibhit tract, transferred to Nimār in 1904. The only towns with a population exceeding 5000 are the headquarters of the four tahsils and Itārsi. Their populations were returned in 1901 as :—

Hardā	... 16,300
Hoshangābād	... 14,940.
Seoni	... 7,531
Sohāgpur	... 7,420
Itārsi	... 5,769

Pachmarī is also ranked as a town, but its population in 1901 was only 3020, most of which belongs to the cantonment area. The census was taken in the cold weather, and during the season the population is considerably more. The urban population in 1901 was thus 54,980 or 12 per cent. of the total. Besides the towns, the District has seven villages with a population of 2000 or more persons. These are Timarnī (4434), Bābai (4070), Sobhāpur (4058), Sāngākherā Kalān (2705), Bankherī (2574), Sheopur (2276), and Raipur (2070). Forty-one villages or 3 per cent. of the total number contain between 1000 and 2000 persons. Excluding

Bimrose, Cullie, Doyg,

NADIPURA VILLAGE.



towns, the average village in 1901 contained 65 houses and 290 persons. The larger villages are usually the principal places of the old tālukas and parganas, where the people used to collect for protection during the Pindāri raids and where big weekly markets are still held. Another survival of those disturbed times is to be found in the invariable concentration of all dwelling-houses on one village site ; scattered houses with a tenant living on his own holding are practically unknown.

46. The early enumerations were made in a very rough

Variations in area
and population.

and ready manner, and are not of much value for purposes of scientific comparison. They are, however, of interest as

furnishing part of the information on which the settlements of those times were based. The first two censuses were taken before the cession of Hardā, and only included the three eastern tahsils. The first recorded census was made by Major Ouseley about the time of the twenty years' settlement in 1836, and the total population was then returned as 205,000, or 130 to the square mile. The second census was taken between 1844 and 1847 by Captain Spence, who gave the total population as 243,000 or 154 to the square mile, which is equivalent to an increase of about 18 per cent. The population of these three tahsils as shown in 1901 was 318,000, giving an increase of 31 per cent., which is probably about correct. The average density returned at these early enumerations apparently refers only to the area occupied for cultivation. Thus, the density of population in the valley has remained practically unaltered since 1847, which suggests that 150 persons to the square mile is about the maximum that can be supported by the methods of agriculture practised in this District. A regular census of the District has been taken on five occasions, namely, in 1866, 1872, 1881, 1891, and 1901. In 1866 the area was returned as 3997 square miles, and the population as 427,000 or 107 to the square mile. In 1872 the area had risen to 4222 square miles, and the

population to 440,000 or 104 to the square mile, so that an increase of 3 per cent. in population was more than compensated by an increase of 5 per cent. in area. In 1873 the Bordhā *tāluka*, with an area of 215 square miles and a population of 10,000, was transferred from Betūl to Hoshangābād. The adjusted area of the District was thus 4437 square miles, and the population 450,000 or 101 to the square mile. In 1881 the population was returned as 489,000 or 110 to the square mile, showing an increase of 9 per cent. on the figures of 1872 as adjusted after the transfer of Bordhā. The growth in population deduced from vital statistics during the same period was 6 per cent. Immigration accounts for the difference. In 1891, the revised area of the District was 4594 square miles and the population 530,000 or 115 to the square mile, giving an increase of 8 per cent. since 1881. The urban population as a whole remained stationary, though Hardā town increased by 20 per cent. The expansion of the rural population was fairly even throughout the District, except in the Hardā tahsil, where the settlement of the Chārwa tract was responsible for a considerable increase. The increase deduced from vital statistics during this decade was only 5 per cent., and immigration must again be held responsible for the difference. During the next decade there were three transfers of territory. Two of these are negligible, namely, the transfers of one-fifth of a square mile to Bhopāl in 1894, and of 2 square miles of forest to Betūl in 1897. But in 1896, the Balrī tract, a considerable but sparsely peopled portion of the Hardā tahsil, 571 square miles in extent, with a population of 32,000, was transferred to Nimār. By these transfers the area of the District was reduced to 4020 square miles, and its population to 497,000 or 124 to the square mile. In 1901 the population was 449,000 or 112 to the square mile, giving a decrease of 10 per cent. on the population returned in 1891, as adjusted after the subsequent transfers of territory. This decrease was, of course, the work of the famines. It is indicative of

agricultural depression that the urban population increased during this decade by 20 per cent., while the rural population diminished by 13 per cent. The loss of population was fairly evenly distributed amongst the tahsils. Hardā and Itārsi were the chief gainers from the increase in urban population. The decennial birth-rate for this period was 37·5 per mille and the death-rate 44. In six years deaths exceeded births, namely, in 1891, 1894, 1895, 1896, 1897 and 1900, and the worst years were 1897 and 1900, when the birth-rates were 29 and 33 per mille and the death-rates 68 and 57 per mille, respectively. Besides privation, cholera was the chief cause of mortality. It must be remembered, however, that in addition to the deaths among the natives of the District many immigrants from Central India entered the District in a dying condition. The excess of deaths over births during the decade was returned as 25,000, while the decrease in population was 48,000. There was probably a certain amount of emigration to Nimār, but the greater portion of the difference must be attributed to defective reporting of deaths during the famine years. During the six years from 1901 to 1906 there has been a rapid development of the population, in spite of epidemics of plague in 1903 and 1904. The average birth-rate has been 43 per mille and the death-rate 33 per mille, while the number of registered births has exceeded the deaths by 26,000. During this period there has been yet another transfer of territory, to which reference has already been made. In 1904 the Kālibhit tract, 344 miles in area, but with a population of less than 3000, was transferred to Nimār. The adjusted area of the District is thus 3676 square miles, and its population 446,000 or 121 to the square mile.

47. The District owes its population, except in so far as Migration. it consists of the aboriginal Gonds and Korkūs, to immigration from three sources, namely, from Bundelkhand, Mārwār and Khāndesh. The date

of these immigrations can only be approximately given. Colonel Sleeman is reported to have said that there were two great immigrations, one in Akbar's time, and one in 1784 A. D. Mr. Elliott, however, could find no trace of any cultivating race who settled here so long ago as Akbar; and he was of opinion that immigration only became extensive in the time of Aurangzeb, whose frequent presence at Burhānpur must have made his followers well acquainted with the fertile but uncultivated valley. The first settlers came from Bundelkhand and Gwalior, probably between 1650 and 1700, though some may have come a little earlier. The immigrants entered the District by way of Saugor and Nar-singhpur, and occupied the whole of Sohāgpur and Hoshangābād and part of Seoni. Between 1750 and 1800 there was another wave of immigration, partly as before from Upper India through Bundelkhand and Gwālior, but chiefly from Mārwār. The Mārwāri settlers entered the District through Handia, and spread over the whole of Hardā and the Chārwa tract and part of Seoni. About the same time immigrants from Khāndesh arrived in smaller numbers by way of Khan-dwā and Burhānpur, and settled in Chārwa and Hardā. Then followed the period of the Pindāri raids, when existence in Hoshangābād was far too precarious to encourage settlers. After the British occupation the tide of immigration from the north once again set in; but spreading as well over the vast depopulated areas of Bhopāl, Khāndesh, and Berār, its advance was scarcely perceptible. At the same time there was also some emigration to neighbouring Districts, where the cultivator's prospects seemed more promising. Since the census of 1881 figures are available to illustrate these tendencies. In that year 14 per cent. of the population enumerated were born outside the District, while 27,000 natives of the District, equivalent to $5\frac{1}{2}$ per cent. of its population, were enumerated in other Districts. In 1891, $12\frac{1}{2}$ per cent. of the population were immigrants, chiefly from Nimār, Betūl, Khāndesh and Central India, and 23,000

persons born in the District, equivalent to $4\frac{1}{2}$ per cent. of the population, were enumerated elsewhere. During the famines of the next decade there was a good deal of immigration from Central India to obtain relief ; but the immigrants, arriving more often than not in a moribund condition, helped to swell the death-rate rather than the population. At the census of 1901, 11 per cent. of the population were returned as born outside the District ; of these about half had come from Central India. On the other hand, about 50,000 natives of Hoshangābād were enumerated in other Districts, but the bulk of these were the inhabitants of the Balri tract, which had been transferred to Nimār in 1896.

48. Taken as a whole, the climate of the Hoshangābād District, especially in the hot weather, is fairly healthy. The rains, however, are generally unhealthy ; while the bitter and piercing wind which blows down the Nerbudda valley during the cold months, often causes sickness. The town of Hoshangābād has an especially bad reputation for unhealthiness.

Meteorological conditions play an important part in the production of disease. With the advent of the rains bowel diseases become common, and such specific diseases as small-pox and dysentery make their appearance. If small-pox is endemic in the neighbourhood, it is exacerbated. When the rains are established and there are pools of water lying about, malarial fever is prevalent, due probably to an increase in the number of mosquitoes. During the cold weather, respiratory diseases make their appearance ; and if plague is either indigenous or imported, it soon takes root and spreads very rapidly, dying away as the hot weather comes in. Among ordinary diseases, fever causes the greatest mortality, as is natural in a country so intersected with watercourses, where it is habitual to drink much river water, which must get impregnated with decayed vegetable matter. Deaths from fever average about 25 per mille of the population every year ; and in the worst recorded years, 1896

and 1897, 17,000 and 19,000 deaths, equivalent respectively to 35 and 41 per mille of the population, were returned as due to this disease. As enteric is an autumnal fever, it is probable that a fair number of such cases, as well as cases of pneumonia, are included under the general head of fever. The principal form of malarial fever prevalent in the District is the benign tertian. Plague made its first appearance here in 1901, and since then has never been absent, but only in 1903 and 1904, when deaths were 5700 and 2400 respectively, or 13 and $5\frac{1}{2}$ per mille of the population, have the outbreaks been at all serious. As in other Districts, the disease usually appears at the beginning of the cold weather, reaching its climax about February, and dying out during April and May. The District has always had a bad reputation for cholera, and as far as records or memory go back, it has never been entirely absent for more than two or three years at a time. The worst recorded year is 1891, when deaths numbered 3600 or 7 per mille of the population; and in three other years, 1892, 1897 and 1900, more than 2000 deaths from this disease have been returned. Since 1900, however, the District has been fairly immune. Small-pox has been endemic in this District for many years, although the number of cases is often very small. In eighteen years since 1871 the mortality has not reached these figures, and the worst outbreaks were in 1900 and 1875, when 725 and 658 deaths respectively were recorded. The death-rate is now reported by the Civil Surgeon to bear a very low proportion to the attack rate, which would imply that the disease is not of a virulent type. The Civil Surgeon is also of opinion that protection by vaccination has made the disease less troublesome. Leprosy of the tubercular variety is sometimes seen. Blindness, as in other Districts, is very prevalent. A large number of cases of ulcer of the cornea are to be seen, and in untreated cases opacities, with subsequent blindness, frequently result. Although the soil is alluvial, intestinal worms are not

very prevalent, and the number of cases treated at the dispensaries is small. No case of guinea-worm has been treated for some years. Lathyrism, the form of paralysis caused by eating tiurā (*Lathyrus sativus*), was not uncommon during the famines, when tiurā was often used as human food, but is now seldom seen.

49. Of the total population, 61 per cent. are supported by pasture and agriculture. Of these, Occupation.¹ 262,000 or 58 per cent. are returned as depending on agriculture proper, and 13,000 or 3 per cent. on the provision and care of animals. The agricultural element includes 160,000 landlords and tenants, equivalent to 36 per cent. of the population, while agricultural labourers number 100,000 or 22½ per cent. of the population. Personal and domestic servants are 18,000, or 4 per cent of the population, which is the second highest percentage in the Provinces. Amongst traders, grass and fodder sellers are the most important, numbering 14,000. There are 6300 grain and pulse dealers; 3900 vegetable and fruit sellers; 3700 pressers and sellers of vegetable oil for lighting; 2700 salt sellers; 2000 milk and butter sellers; 1800 fishermen and fish dealers; and 1800 grocers and general condiment dealers. Of manufactures, textile fabrics are the most important, supporting 19,000 persons or over 4 per cent. of the population, of whom 14,000 are employed in the cotton industry. Boot, shoe and sandal-makers number 11,000 or 2½ per cent. of the population, and general labourers are also returned as 11,000. Religious services support some 9000 persons, including 7500 Hindus, which is the highest number in any District of the Provinces. There are also nearly 9000 mendicants who are not connected with any religious order.

50. The principal language of the District is the Bundeli dialect of Western Hindi, which Language, Bundeli. is spoken by 64 per cent. of the popu-

¹ Figures in this para. are taken from the census of 1901.

lation. Western Hindī and Punjābi are descended from the Saurasena Apabhramsa or corrupt form of Sanskrit belonging to the middle Doab. Western Hindī is now the language of the country between Sirhind in the Punjab and Allahābād in the United Provinces, extending also to Bundelkhand and the western Districts of the Central Provinces, which were colonised from those areas. It has several recognised dialects, of which the principal are Hindustānī, Braj Bhāsha, Kanaujī and Bundeli. Of these Hindustānī is now the recognised literary form of Western Hindi. Bundeli is the dialect spoken in Bundelkhand and the neighbourhood, including the Bundelkhand agency Jalaun, Hanūrpur and Jhānsi, and Saugor, Damoh, Nar-singhpur, Seoni and parts of the Hoshangābād and Chhind-wāra Districts of the Central Provinces. Bundeli has a small literature, dating from the time of Chhatar Sāl of Pannā and his immediate predecessors and successors of the early part of the eighteenth century. The Serampur missionaries translated the New Testament into it.

51. The Mālwī dialect of Rājasthānī is spoken in the

Mālwī. Hardā tahsīl, being returned by about 24 per cent. of the population of the

District, and also in the Makrai State. The headquarters of Mālwī are in the Mālwā country round Indore, but it extends over a wide tract from Bhopāl on the east to Udaipur on the west. It is also spoken in the Betūl District, and its presence here and in the Hardā tahsīl may probably be attributed to the invasions of Hoshang Shāh of Mālwā in the fifteenth century. This king made several expeditions against the Gond stronghold of Kherlā in Betūl and finally annexed it and the surrounding country. The Mālwī Brāhmans of Betūl have been settled there for a long period and their immigration may be assigned to the time of Hoshang Shāh, in whose time Hardā and Betūl were probably occupied by Hindu immigrants. These brought their special dialect which still survives. Hoshang Shāh gave his name

to Hoshangābād. The remainder of the District was occupied at a later period, probably in the fifteenth and sixteenth centuries, by colonists from Bundelkhand, coming through Saugor and Narsinghpur.

52. Of other languages Mārwāri, Urdū and Marāthi Other languages. are each returned by a few thousand persons. The Kirs, a cultivating caste, have a dialect of their own, which is a form of Mārwāri. About half the Gonds and Korkūs are returned as speaking their own tribal languages, while the remainder have learnt broken forms of the Aryan vernaculars current around them.

RELIGION.

53. The statistics of religion show that 83 per cent. Statistics. of the population are Hindus, 10 per cent. Animists and 5 per cent. Muhammadans. The Gonds are generally returned as Animists, while the Korkūs consider themselves to be Hindus. Of the 19,000 Muhammadans, 9000 reside in the towns of Hoshangābād, Hardā, Seoni and Sohāgpur. Members of this religion own 32 villages. In 1901, there were nearly 3000 Jains, of whom 1100 lived in Hardā town. Christians numbered 2706.

54. The following description of rural religion is mainly taken from Sir C. Elliott's Settlement Report, pages 118—127, with the addition of some facts collected by the writer. The religion of the uneducated majority is a curious mixture of Hinduism and Animism, in which the belief in evil spirits and godlings is the main ingredient. The antagonism between Vishnu and Siva is hardly understood in the villages, and it is very common to see a temple dedicated to Rāma and Lakshman and Mahādeo's emblem and bull at the door, while the same officiating priest makes offerings to both. Temples are rather uncommon except in the towns and such as exist

are very often mere ordinary tiled or thatched wood houses, and it is but seldom that the white spires of a brick temple are seen. As a rule, the villagers keep under pipal and banyan trees their gods Mahādeo, Māta and Hanumān ; one or other of the two latter is usually the Khedāpati or village god. Hanumān is the only god of whom any representation is attempted ; the rest are common stones daubed with red paint. Pilgrimages to the shrine of Onkār Māndhāta, one of the twelve chief places in India sacred to Mahādeo or Siva, are very common, and next in popularity comes Jagannāth. Formerly pilgrims went by Rāmtek and Sambalpur, but now the railway tempts them to include Prayāg (Allahābād), Kāshi (Benāres) and Gayā on their way. A number of proprietors and even some cultivators employ Sarwaria Brāhmans to bring water from Allahābād for an offering to Mahādeo at Māndhāta. Hanumān is the patron of wrestlers, who invoke his aid before beginning their exercise. They revere him for his quality of gigantic strength. Hardaul Lāla was the brother of Jhujhār Singh, Rājā of Orchhā, and was poisoned by him on suspicion of loving his wife. He has been deified and Elliott wrote of him :—‘ Hardaul Lāla is the protector against ‘ cholera. It was in a grove sacred to him that the British ‘ troops were encamped in 1817, when cholera first broke ‘ out in the Nerbudda valley. For this reason he was made ‘ the patron saint of cholera, equally able to send and to ‘ remove it ; and I have seen a statement in the old official ‘ correspondence of 1828 that, when we first took the country, ‘ Deputy Commissioners were ordered to force the mālguzārs ‘ to set up *chabītras* or altars to Hardaul Lāla in every ‘ village. This was part of the system of “ preserving ” the ‘ cultivators since it was found that they ran away if their ‘ fears were not calmed by this respect paid to their god.’

55. Another favourite local godling is Bhilat, a deified mortal. deified cowherd. The following legend is current about his life. A Gaolin, Maidā.

by name, was childless and had gone several times to Chaurāgarh to ask Pārvatī to give her a child. At last Pārvatī, taking compassion on her, caused her to conceive and bear a child by Mahādeo. This was Bhilat. When he was a boy in his mother's house, Mahādeo came one day in the guise of a beggar and asked for alms. The woman said she could not give him anything as it was Ashtamī. Mahādeo begged hard saying to her 'I gave you all this 'wealth and this child,' but the woman did not believe him. So in revenge he stole Bhilat and disappeared, taking him in his wallet. The husband and wife searched everywhere, and finally suspecting the truth, went to Chaurāgarh and begged Mahādeo to give him back. Mahādeo would not do this, but gave them another son Silat who is also worshipped. Bhilat was brought up by Mahādeo and grew very strong and performed various feats of magic, so that he conquered Bengal and married the daughter of a Rājā. But when he returned to Chaurāgarh, Mahādeo told him to go and live with his father and mother, so he went and lived in the hut of Reojī and Maidā Gaolin. And he performed other miracles so that his fame spread abroad and after his death he was worshipped. Bhilat cures cattle of their diseases and makes barren cows to bear. Other two local godlings are Rajwā and Sonel who were also brothers. The former cures snake-bite and the latter cattle murrain. The belief in the cure for snake-bite is curious, Elliott says. The moment a man is bitten, he must tie a string or a strip of his dress in five knots, and fasten it round his neck, crying 'Dohāi Rajwā Deo' ("Mercy, oh God Rajwā!"). At the same time he makes a vow to give so much to the god if he recovers. When he gets home, they have tests to see if the poison is in him still. They take him in and out over the threshold and light a candle before him, which acts have a tendency to develop latent poison. They then give him salt and *nīm* leaves to eat; if he can taste them, he is safe; if not, the villager goes out and cries to Rajwā Deo for

the space of half an hour ; and so on till he is cured. No one, Elliott's informers said, had ever been known to die of a snake-bite after this treatment, but the god has no power over a *biscobra*.¹ The bitten man must not untie the string round his neck until the day when he goes to offer what he vowed, which should be, at the latest, on the next Dasahra ; but if he attempt to cheat the god by offering ever so little less than he promised, he will die on the spot in great agonies. The principal family gods are Dulhā Deo, the young bridegroom who was carried off by a tiger on his way to his wedding, and Bijāsen, a Gond deity. Dulhā Deo gives fruitfulness to the marriage bed. His worship is conducted in the house by the head of the family and children are not allowed to be present at it. Bijāsen is charged with the health of children and in her name strings are tied round their neck from the moment of birth till their marriage. Rāmdās Bābā was a Gūjar saint, who lived in the village of Raipur near Hoshangābād. He did nothing but pray and sell tobacco, and when people came to ask for it, he used to tell them to weigh it for themselves in order that he might not be interfered with in his prayers. Some dishonest people, therefore, took too much, but when they got home they always found that the tobacco had shrunk to the weight for which they had paid. Rāmdās was buried alive and founded the sect of Rāmdāsīs, who do not shave their heads at the death of a relative and perform no *shrāddh* ceremony for the dead. These practices have, however, now been partially abandoned. In Hoshangābād near the Commissioner's old bungalow is the tomb of Devā Bai. She was a female ascetic, who built a tomb for herself underground, went in and had the door bricked up. Rāmji Bābā and Devā Bai are the presiding deities of Hoshangābād. Bhangī Bābā is a living devotee who resides at Natāya and cures people of paralysis by smearing them

¹ A kind of lizard wrongly believed to be poisonous.

with *gānja* ashes and making them drink the water of a well there. The belief in his miraculous powers is widespread.

56. In reference to the village godlings and their Village Priests. priests Sir C. Elliott wrote¹ :—‘The vernacular for the local deities is *dhāmi* ‘and the common phrase *deo dhāmi* denotes these and the ‘Hindu gods. The former are thought inferior in power to ‘the real gods, but more meddlesome and harmful. They are ‘probably either Gond deities, accepted by and handed down ‘to the immigrant cultivators, or else the spirits of dead men. ‘They are all supposed to visit with their afflatus one favoured ‘individual, who is called the Parihār, and through him they ‘proclaim their will to mankind. There are two fixed occasions when the Parihār is inspired by the god,—the 14th ‘Sudi of Chait which is called the Dasahra of the *dhāmi*, and ‘the four days preceding the true Dasahra, in Kunwār; but he ‘can also call the god down whenever he requires. If any ‘one is sick, or has a sick child, or if a woman wants a child, ‘the Parihār is visited, a vow is made to give so much if the ‘wish is gratified, and an offering is prescribed ; the Parihār ‘then invokes the god, and is told by him what to prescribe in ‘order that the desired end may be attained. If the person ‘does get his wish fulfilled, he must perform his vow, under ‘pain of the vengeance of the god. If it is not fulfilled, he ‘goes and tries another god ; but the non-fulfilment throws no ‘doubt on his belief in the power of the first god to have cured ‘him if he had liked ; it is set down to his capriciousness or ‘disinclination. A villager will seldom bring his child to the ‘dispensary till he has first tried all the *deo dhāmi* in his ‘neighbourhood. The god is said to come to the Parihār’s ‘head (*sir par ānā*), and he, when thus visited, is said to ‘revolve (*ghūmna*). On one occasion when I saw the proceeding, the man did not literally revolve ; he covered his ‘head up well in his cloth, leaving space over the head for the

¹ Settlement Report, paras. 89, 90.

'god to come to ; and in this state he twisted and turned himself about rapidly and soon sank down exhausted. Then, 'from the pit of his stomach, he uttered words which the bystanders interpreted to direct a certain line of conduct for 'the sick man to pursue. But perhaps this occasion was not 'a fairest test, as the Parihār strenuously objected to the presence 'of an unbeliever, on the pretence that the god would be 'afraid to come before so great a *hākim*. It is worth remark, 'as proving the non-Aryan origin of this worship, that the 'Parihār cannot endure the presence of a cow or a Brāhmaṇ 'while he is inspired ; the god would leave his head if either 'of them came near. The Parihār is generally an Ahīr or a 'Gond, but I believe he may be of any caste. I have often 'asked what test they have that a Parihār is really inspired, 'and is not deceiving them, but I have never got a satisfactory 'answer.'

57. The following are some of the local customs observed at festivals. They are taken principally from the description in paras.

Festivals.

96—102 of Sir C. Elliott's Report with additions by the writer. The Akhā Tij or commencement of the agricultural year falls on the 3rd day of Baisākh Sudi (April-May). On the second day of Asārh, in Hoshangābād town, the wooden images of Jagannāth, Subhadrā and Balbhadra are placed in a chariot and taken through the streets. They stop before the door of some well-to-do person who gives alms to the devotees. This goes on for several nights. The festival of Nāg Panchamī is held on the 5th day of Shrāwan Sudi (July-August). The towns and villages teem with snake-charmers, and the snakes crawl round pans of milk placed on the ground watched by the devout worshippers. Wrestling competitions are also held. The Hindolā festival lasts from the 3rd to the 8th day of Shrāwan Sudi (July-August). The images of Rādhā and Krishna are swung in a cradle and their temples are decorated with lamps and balls. On the 15th day of Shrāwan Badi every one worships his own tutelary god.

Thieves believe that if they commit a theft on this day and are not caught, they will be lucky throughout the year. They, therefore, try to steal something and every one has to be on the watch for his property. On the first day of Bhādon (August-September) occurs the festival of the Bhujaria. Eight days previously grains of wheat are sown in a pot of earth and manure, and spring up so rapidly that by the end of the month the pot is full of long yellowish-green stalks. This growth is called the Bhujaria. On the first of Bhādon all the women and girls take their Bhujarias, throw the earth and manure into the water, and distribute the stalks to their friends, who bind them in their turbans and about their dress. At Hoshangābād itself where the earth is thrown into the Nerbudda, the sight is a very pretty and lively one. On the 15th day of Bhādon on the new moon is held the festival of Polā, when oxen are worshipped. Small children make models of oxen and draw them about, carrying toy images of the deities. At the Dasahra festival horses are worshipped. The 10th of Kunwār Sudi (September-October) is the day for the war horse, whereas mares are revered on the 9th. Rājā Raghujī Bhonsla always professed to be a zamindār and not a man of war, and as zamindārs are supposed only to own mares, he performed his Dasahra on the 9th. On the night before the Dasahra, the Sonārs assemble at the riverside and hold a feast. After this they are said to take an oath that none of them will disclose the amount of the alloy which a fellow-craftsman has mixed with the precious metals. Thereafter any Sonār who does so is put out of caste. On the second day of Kārtik the Gonds have a festival in honour of Gango Telin, who was a great wizard. An image of her is made with earth by a Koli ; and the Gonds from several villages assemble and bring bamboos with peacocks' feathers stuck into them. They parade round the image making offerings to it of grain or sugar. Then they go to the mālguzār of the village and give him a lemon, in return for which he presents them

with a cocoanut. The Deothān falls on the 11th day of Kārtik, when the gods awake from sleep. From this day the cultivator begins to eat sugarcane, garden vegetables, fruits like the *ber* and *aonlā* and all the new autumn crops. A pyramid of canes, or in default, of juār stalks, is made, under which are placed a small quantity of the new grains and vegetables, and five of each of the fruits; and after doing reverence here and walking seven times round the piles, the cultivator cuts off the juār heads and hangs them up in his house as a charm against sickness. At the Diwāli a custom is practised of frightening the cattle (*dhor bichkāna*). Every one keeps awake all night and the herds-men go about begging in a body, singing and keeping the cattle from sleeping. In the morning they are all stamped with the hand, dipped in yellow paint for the white ones, and white (rice) paint for the red ones, and strings of cowries or peacocks' feathers are tied on their horns. Then they are driven out with whoops and yells, and the herdsman, standing in the doorway, smashes a *gharā*¹ on the last. The neck of it is put upon the gate-way leading to the cattle-sheds and preserves them from the evil eye.

58. Sir Charles Elliott described the Holi and the Gond festival of climbing the pole, which occurs

The Holi and Meghnāth. in connection with it, as follows² :—

'The Holi is kept in much the same way 'as in Upper India, but it is followed by two ceremonies 'which are quite peculiar; they are called the *bīr phirnā*, and 'the *gur tūtña*. On the 1st of Chait, the day after the Holi, *bīr phirnā*, or the "hero's swinging" comes off. This originally 'was a hook-swinging or *charak pūjā*, but the hook is nearly 'abolished now. In some hill villages it is still said to be prac-tised, and in Makrai the swinger has a hook passed through 'his back, but merely for the name of the thing, as his weight 'does not rest upon it and he hangs by a stout rope round his

¹ Earthen pot.

² Settlement Report, paras. 101, 102.

' waist. In our own territory the swinging by a rope round
 ' the waist is still practised at times, but not commonly, the
 ' zamindārs being horribly afraid of the consequence if the
 ' pole should break and the man fall to the ground, so that
 ' instead of a man they generally fasten up a white pumpkin
 ' and swing it round seven times, three one way and four the
 ' other. The man who swung used generally to be a man
 ' who had vowed to do it in case some wish was performed :
 ' if no such person appeared, some one had to be hired for
 ' the purpose. If a woman makes a vow, she climbs up the
 ' pole, but does not swing, and never did. The tall upright
 ' pole, painted red, with pegs in it to climb up by, is called
 ' *meyhnāth*, but there does not seem to be a reference to the
 ' son of Rāwan, or at any rate none is now understood.
 ' Almost every village of any size has a *meyhnāth*. The *gur*
 ' *tūtna* is an essentially Gond festival, and it may come off on
 ' any day till the 13th Badi of Chait. A stout pole, about
 ' twelve or fifteen feet high, is set up, and a lump of *gur* with
 ' a rupee in it placed on the top, and round it the Gond
 ' women, "horny-handed daughters of the plough," take their
 ' stand, each with a little green tamarind rod in her hands.
 ' The men collect outside, and each has a kind of shield, made
 ' of two parallel sticks joined by a cross-piece held in the
 ' hand, to protect themselves from the blows. They make a
 ' rush together, and one of them swarms up the pole, the
 ' women all the while plying their tamarind rods vigorously ;
 ' and it is no child's play, as the men's backs attest the next
 ' day. When he gets to the top he takes the piece of *gur* and
 ' slips down, and gets off as rapidly as he can. This is done
 ' five or six times over, with the greatest good humour,
 ' and generally ends with an attack of the women *en masse*
 ' on all the men. It is a regular Saturnalia for the women,
 ' who lose all fear and respect even for a Settlement Officer ;
 ' and on one occasion when he was looking on, he only
 ' escaped by the most abject submission, and presentation of
 ' rupees.'

59. When there is drought the image of Khedāpati, the goddess of the village, is smeared Local superstitions. with cowdung and a frog tied to a rice-pounding pestle is placed in front of it. It is thought that the goddess will be troubled by being smeared with cowdung and that she will go as a messenger to god for rain. Another device is for women to dress in men's clothes and go and plough in the fields. The women also go and take the mālguzār of another village captive and bring him in front of Khedāpati's shrine. On the 15th Asārh at night the Barais go to the barejā or betel-vine garden and there they boil grain and make some cakes. Then they break a cocoanut and recite the following verse :—

Gerā se bel, sūp se pān, Chal nāg bel mātā ūpar ko.

or, 'May the stem of the vine be as large as a stake, ' and the leaf like a winnowing fan. Oh, mother creeper, ' grow up high.' Sometimes the mango tree and the *aonlā* (*Phyllanthus Emblica*) are married. When a mango grove is planted, the first year's fruit is given to Brāhmans. When two mangoes grow joined together it is called *jorivā* or *duganā*. They are always offered at a temple. If a mango tree does not bear fruit, one device is to cut off a branch and take or send it to be thrown into the Ganges so that the fertility of the tree may be restored. It was often customary to bury treasure where the shade of the mango tree fell.

60. Christians numbered 2706 in 1901, of whom 303 were Europeans, 102 Eurasians, and Christians. 2301 native Christians. The number of native Christians increased by 2000 during the preceding decade. The principal proselytising agency is the Friends' Foreign Mission, which has stations at Hoshangābād, Sohāgpur, Seonī, Itārsi and Bankheri. The staff consists of 36 European missionaries assisted by 368 native converts. Funds are contributed principally by the members of the Society of Friends in Great Britain, but a considerable amount is now also raised locally. At Rasūlia near

Hoshangābād workshops have been established for the training of boys in carpentry, and the building and repairing of carriages, and excellent furniture is turned out. Carpet-weaving and shoe-making are taught at Seoni, and a number of orphan boys are employed at Itarsi and other places in weaving cotton materials. A mission training-farm is maintained at Lehī near Seoni. The Mission also supports 24 schools and four dispensaries. Its converts number 1200 persons. The Foreign Christian Mission Society has stations at Hardā and Timarnī. The staff consists of nine American Missionaries and a number of native assistants. The Mission supports, with the assistance of Provincial and local fund grants, two dispensaries, a leper asylum with an average of 25 inmates, a high school affiliated to the Allahābād University, and three other schools. Hoshangābād is in the Anglican diocese of Nāgpur and is visited by a Chaplain from Jubbulpore. It is in the Roman Catholic diocese of Nāgpur.

CASTE.

61. The earliest residents of the District are the Gonds and Korkūs, the former of whom constitute 11 and the latter 5 per cent. of the population.¹ The Hindu community has been recruited from the three localities of Bundelkhand, Mālwā and Khāndesh. Immigrants from Bundelkhand were the most numerous, and entering the District through Saugor and Narsinghpur occupied the whole of the eastern tracts and large portions of Seoni. This settlement probably took place in the 16th and 17th centuries. A part of the Seoni and Hardā tahsils was occupied from Mālwā, probably in the fifteenth century when Hoshang Shāh of Mālwā to whom Hoshangābād owes its name must have passed through the District on his expeditions to

¹ The number of Korkūs has been largely reduced by the transfer of Dāmjpura and Kālibhit to Nimr.

Kherlā in Betūl. There are also some later immigrants, who are commonly known as Mārwāris. A few castes, as the Jāts and others, have a subcaste which goes by this name. A small part of the population of Hardā is of Khāndesh extraction through Khandwā and Burhānpur. Brāhmans are numerous in the District, forming 8 per cent. of the population, and Rājputs constitute 6 per cent. or including the castes of Jādam and Raghuwansi who are nominally Rājputs, 11 per cent. These with the Gūjars and Kurmis are the principal cultivating castes, and there are also a number of Jāts, Lodhis and Ahīrs. Mehrās, Katias and Chamārs are the menial and labouring castes.

62. Brāhmans (34,000) are the second caste in the

District in numerical strength. Their
Brāhman.

large numbers are probably to be attributed to the fact that the District is bordered throughout its length by the holy Nerbudda. They are a landowning and not a cultivating caste, Sir C. Elliott says, practically all the Brāhmans in the District being either the owners of villages, or patwāris, astrologers and mendicants. They did not immigrate in bodies, but singly, and having generally a little capital to start with, or being better able to amass capital than the cultivators, they secured a large number of villages. Since 1860 the number of Brāhmans has apparently somewhat declined, as 42,000 were returned in the census of that year. Most of the Brāhmans come from Northern India, the Kanaujias, Sanādhyas and Jijhotias being the leading subdivisions. Of these the Jijhotias who take their name from Jajhoti, the classical term for Bundelkhand, belong more especially to the District and have been long settled in it. They generally marry among families within the District and are regarded as somewhat lower than the Kanaujias. The Jijhotias may plough with their own hands, which the Kanaujias and other subcastes are forbidden to do. Another local subcaste are the Nāramdeo Brāhmans, who are the priests of the Nerbudda and derive their name from it.

The Nāramdeos and Jijhotias own many villages and live in them and among them are found some of the best landlords. The Nāramdeos have a story that they are the descendants of 14 Rishis or saints, each of whom begat a thousand sons, and on one occasion the whole fourteen thousand attended a sacrifice at Māndhāta, where the progenitors were censured by Mahādeo for their prolificacy. Whenever a Nāramdeo Brāhman is put out of caste and appeals to the headman of the community, he exclaims 'Do justice in the name of the 14,000 Nāramdeos.' Elliott states that the Nāramdeo bears a '*Graeculus esuriens*' character, and the way the tribe swarms to a wedding or a funeral feast is considered a great joke against them. The Bāwisā Brāhmans are another local subcaste. They derive their name from the fact that they are the descendants of 22 families who came from Central India and settled in Hoshangābād. They say that they were formerly Gaur Brāhmans, but their ancestors were put out of caste for receiving gifts from a Rājā after a sacrifice. They had refused to take anything, but the Rājā wrapped up grants of land in the betel-leaves which he gave them, and on this being discovered they were excommunicated by their caste-fellows. The Palliwāl Brāhmans take their name from Pali in Mārwār, and the Khedāwāls came from Gujarāt. Both these classes have large moneylending transactions and where they have invested in villages, their connection with the land is of the same commercial nature as in the case of Baniās. It is said that the Palliwāls were formerly free-booters and that they still worship a bridle at the Dasahra festival in memory of their more adventurous profession. The Marāthā Brāhmans are usually of the Deshasth or Konkanasth subcastes, the former belonging to Poona and the latter to the Konkan. The Konkanasths are also known as Chitapāwan, and Elliott says that their name implies a certain degree of degradation (*chit*, defilement) the reason for which is that the ancestor of this class performed the funeral ceremonies of Parasurāma's father. The fact,

however, that the Peshwā was a Konkanasth more than compensated for this and set them above the Deshasths for a time. The Konkanasths themselves give another derivation of the name Chitpāwan, saying that it means ‘The pure in heart.’ The Shenwi Brāhmans are largely employed as clerks and accountants and the name is said to be a corruption of *siahā-navīs*. They are somewhat looked down upon by the others.

63. Rājputs, excluding the Jādams and Raghuvansi
Rājput. who are now practically separate castes,
number 28,000 persons. The Rājputs are generally of inferior status. They permit widow marriage and many of them do not wear the sacred thread. Many of them have family names derived from villages, while the names of proper Rājputs are enymous or derived from heroic ancestors. The most numerous septs are Chauhān, Chamargaur, Ponwār, Rāthor, Tomar, Bais and Dhākar. The term Dhākar has the meaning of illegitimate and many Kirārs return themselves as Dhākar Rājputs. The Chamargaur Rājputs say that they are higher than the Gaur sept, and account for their name by relating that on one occasion a Gaur Rājput lady having to fly for her life, took refuge in a Chamār’s hut and was protected by him. And out of gratitude she promised to call her child by his name. The Ponwārs were the rulers of Mālwā and the Chauhāns of Delhi. Many of the Rājputs were in the military employ of the Bhōpāl and Marāthā rulers and formerly held their villages rent-free on a service tenure. The Rājputs live mainly in the Hardā and Chārwa tracts and are good cultivators. In Sir C. Elliott’s time they did not plough on the day of the new moon or on the ninth day of the month as it was Rāma’s birthday. The Bais Rājputs who come from the tract of Baiswāra in Oudh are known locally as Pardesis. The Raghuvansi are now a cultivating class, found mainly in Rājwāra tract. They number 7000 persons and own about 45 villages. They claim to be the descendants of Rājā Raghu,

who was born of the sun and was the ancestor of Rāma, the hero of the Rāmāyana. They as well as the Jādams claim to be Rājputs, but they marry among themselves, whereas a proper Rājput cannot take a wife from his own sept. They may properly therefore be considered as a separate caste. Sir C. Elliott said of them :—‘They are obviously of impure ‘blood as they marry only among themselves, but whenever ‘they get wealthy and influential, they assume the sacred ‘thread, stop all familiarity with Gūjars and Kirārs (with ‘whom they are accustomed to smoke the *huqqā* and take ‘water) and profess to be very high caste Rājputs indeed. ‘They however permit widow marriage and invest their boys ‘with the sacred thread at the time of marriage instead of ‘performing the proper ceremony.’ The Jādams or Jaduvansis are another caste in the same position as the Raghuvansis. They number about 16,000 persons or 3 per cent. of the population, but have only 15 villages. They say that they originally came from Karauli State in Rājputāna. Dr. Hunter states that the Jādam is a brave soldier but a bad agriculturist ; but in the Central Provinces he appears to have lost his old courage as the saying about him is :—‘Pattā khatkā, Jādam satkā,’ or ‘The Jādam turns tail at the rustle of a leaf.’ The Jādams plough with their own hands and allow their women to work in the fields. They often marry two or three wives for the assistance which is thus afforded to them in cultivation. Divorce is somewhat common in the caste, notwithstanding that the third party has to repay to the husband the expenses incurred by him on his marriage. Some women are known to have had ten or twelve husbands. The Jādams are good cultivators, but many of them work as farm-servants and labourers. When a girl of the caste is seduced by a Jādam man, they perform what is known as the *dundā* marriage ; in this the suitor merely gives a ring to the girl and a feast to the caste-fellows and they are considered as married. A noticeable peculiarity among them is that men

of the caste use the feminine forms of verbs in their speech and women the masculine forms.

64. Baniās number 9000 persons or 2 per cent. of the population and now own 135 villages as Baniā. against only 33 in 1867. Baniās do not value a village so much for the profits of agriculture as for the advantages which it gives as a field for the extension of their money and grain-lending business. The principal subcastes found locally are the Agarwāls, Parwārs and Mahesris. The Agarwāls are either Hindu or Jain, the Mahesris usually Hindu, and the Parwārs nearly always Jain. The Parwārs have a subcaste called Benaikā, the offspring of irregular connections, who permit widow marriage.

65. The Gūjars number 22,000 persons or 5 per cent. of the population and have 45 villages. Gūjar.

They reside principally in the Hardā tahsil and also in Sohāgpur. General Cunningham identified the Gūjars with the Yuechi, an Indo-Scythian tribe, but this is doubtful. They are, however, a well-known historical caste and have given their name to the province of Gujarāt and to Gujarāt District and Gujranwāla town in the Punjab. They are probably graziers and were also well-known freebooters in Northern India. Mr. Crooke says of them¹ :—‘The Gūjars as a tribe have always been ‘noted for their turbulence and habit of cattle-stealing. ‘Bābar in his Memoirs describes how the commander of the ‘rearguard captured a few Gūjar ruffians who followed the ‘camp, beheaded them and sent their heads to the Emperor. ‘Jahāngīr remarks that the Gūjars live chiefly on milk and ‘curds and seldom cultivate land; and Bābar says “Every ‘time I entered Hindustān the Jāts and Gūjars have regularly ‘poured down in prodigious numbers from the hills and wilds ‘to carry off oxen and buffaloes.” They maintained their old ‘reputation in the Mutiny when they perpetrated numerous ‘outrages and seriously impeded the operations of the British

¹ Tribes and Castes of the N. W. P. art. : Gūjar.

'army before Delhi.' Mr. (Sir D.) Ibbetson remarks 'of them :—The difference between a Jāt and a Gūjar was 'once thus described to me. The Jāt will steal your buffalo. 'But he will not come back afterwards and say that his old 'father knows where it is and can get it back for you for Rs. '20 and then keep the Rs. 20 and the buffalo too ; the Gūjar 'will.' But the Gūjars of the Central Provinces have abandoned these predatory habits and have settled down into industrious and estimable cultivators. They appear to have come to Hoshangābād from Gwalior. Here they have three subcastes, the Lelorhā, Mundle and Jādam. The Mundles are so called because they take off their turbans when they eat and expose their shaven heads, while the Lelorhās eat with their turbans on. It is noticeable that even in the adjoining District of Nimār the subcastes are different from those of Hoshangābād, the Lelorhā not being found there, while there are two different subcastes, the Badgūjar and Kekre. They permit widow marriage, with the consent of the village *patel*, for granting which he must be paid a fee of R. 1-4. The Gūjars of the Bulandshahar District of the United Provinces furnish, Mr. Crooke says, perhaps the only well-established instance of polyandry among the Hindus of the plains. Owing to the scarcity of women in the caste the wife of one brother, usually the eldest, was also at the disposal of other unmarried brothers living in the house. So far as is known, there is no trace of this custom among the Gūjars of the Central Provinces. They do not usually eat flesh or drink liquor, and Sir C. Elliott characterised the Mundle Gūjars as 'A very religious race; they never plough on the 'new moon nor on the 8th because it is Krishna's birthday. 'Their religious and social head is the Mahant of the 'Rāmjidās temple at Hoshangābād.'¹

66. The Jāts number 5000 persons and own about 50 villages, mainly in the northern portion of Hardā tahsīl. They entered the Dis-

Jāt.

¹ Settlement Report, para. 16.

trict, Elliott states, in the 18th century and came originally from Bharatpur, better known in history as Bhurtpur, but halted in Mārwār on the way. 'They have spread along the banks of the Nerbudda into the Seoni and Hoshangābād parganas. They are the best cultivators in the District after the Pardesi Kurmis, and though they confine themselves to ordinary crops, they are very laborious and the tilth of their fields is pleasant to look on.'¹ They permit widow marriage and eat flesh, and on occasion take liquor. They wear the sacred thread. A number of the Jāts have now become masons and navvies.

67. The Lodhis number 10,000 persons, but have only 4 villages, and are principally Lodhī tenants and labourers. This fact probably indicates that they came to Hoshangābād in comparatively recent times after the other Hindu castes had settled and taken up the land. In Hardā the caste are known by their proper name of Lodhā as in Northern India, of which Lodhī is a local corruption. But except in the form of the name the Lodhis and Lodhās are believed to be identical. The Lodhis formerly had a character for turbulence, but they have now grown more peaceful, though disputes over land are still fairly frequent among them. If a Lodhī has a quarrel with his wife's family, it is said that he takes a second wife and sends his first one home to her parents in order to annoy them. In time, however, his anger evaporates and he will then take his first wife back again and have the two. When a bachelor marries a widow, he is first wedded to a gold ring which he wears in his ear, and if this is lost, he must give a feast to the caste.

68. The Kirārs number 10,000 persons or 2 per cent. of Kirār and Kir. the population, but have only about 10 villages. 'They profess,' Elliott says, 'to have lived here for eight generations and in effect there are documents to show that the ancestor of a large number

¹ Settlement Report, para. 17.

'of them held land in 1700 A. D., in the Rājwāra pargana. His great grand-father is said to have been the first immigrant of the race ; and this takes us back to 1650 or the beginning of Aurangzeb's reign. The story is that Al Rāwat and Dal Rāwat were the two leaders of the immigration from the Dholpur country, and that Al Rāwat did not like it and went back again. Every Kirār will try to trace his pedigree back to Dal Rāwat. They are settled entirely in the Rājwāra pargana, many of them having originally founded villages. They are not very good cultivators ; as a caste they are considered on the same level as the Raghu-vansis and Gūjars, and all three of them will share the same *huqqā* and drink water from each other's vessels.' The name is perhaps derived from *kirād*, a corn-chandler, and the Kirārs may have originally followed this occupation, a fact which would account for their proverbial love of money and keenness over a bargain. The Kirs are another caste allied to the Kirārs, and found only in Hoshangābād and Narsinghpur. They generally live on river-banks and grow melons on the sandy stretches and castor oil and vegetables on alluvial soil. They immigrated from Jaipur and still retain a corrupt Mārwāri dialect, while their women wear the Jaipur dress. They also wear red lac bangles on the wrists and arms. The men tie their *pagris* so as to leave the crown of the head uncovered, and wear necklaces of black wooden beads, with silver images of Bhairon and Devī. The Kirs use buffaloes for riding on, specially in their marriage processions, while other Hindus object to riding on a buffalo, as he is the animal on which Yama, the god of death, rides. Some Kirs make good *shikāris* or native assistants for sport.

69. The District contains a number of Bishnois (worshippers of Vishnu). These are members of a sect founded by a prophet named Jhambāji who lived in Bikaner in the fifteenth century. His followers were mainly Baniās, Jāts, Ahirs and others,

but they have now developed into a separate caste. The Bishnois of Hoshangābād resemble the Jāts in appearance. Jhambāji gave twenty-nine precepts to his disciples, the most important of which are to avoid the destruction of any animal life, not to plough with bullocks and to abstain from opium, tobacco, *bhang* and blue clothing. The Bishnois, however, now generally use bullocks for ploughing, though in Northern India some of them manage with camels. They have their own priests who are known as Sādh ; they permit widow marriage and bury the dead in a place frequented by cattle.

70. The Kurmīs number 20,000 or 4 per cent. of the population, but have only four villages.

Kurmī.

Elliott describes them as follows :—‘The

‘Kurmīs of Hoshangābād are of three classes. The oldest of all are the Chauria Kurmīs, who profess to have come originally from Gwalior about eight generations ago. They are also known as Deshī and are spread largely over the Hoshangābād pargana. The Bundelkhandī Kurmīs have been here for three or four generations. They preponderate in Hoshangābād, but there are a few also in Sohāgpur, Seoni and Hardā. The Pardesi Kurmīs came from Pātan Bihār in the Rāe Barelī District of Oudh, three generations ago, and occupied the newly reclaimed villages of the Zamāni tāluka under the hills. They are by far the best cultivators in the District, as might naturally be expected from their having come most recently from the well-tilled fields of Oudh. Though they neither manure nor irrigate in general, they spend more labour on preparing the land and their fields are cleaner and better kept than any others ; and they are the only one of the regular cultivating castes who plant sugarcane and sow garden crops.’ These Kurmīs are related to the Pardesi Kurmīs of Betūl. They really belong to the Kanaujia subcaste and have now formed two subdivisions, the Kanaujas proper and the Adhrandās, as to whom the following

story is told. A Kanaujia Kurmī once went to Hyderābād and did not return for a long period. Finally the news was received that he was dead and his family set about to perform the funeral ceremonies. But while his wife's bangles were being removed to show that she was a widow, the man appeared just as they had been broken from one hand. The woman was thus considered to be a half widow and her family developed into a separate subcaste. Women of the Adhrandā subcaste only wear bangles on one hand. Kurmī women are strong and industrious and of great help to their husbands in cultivation. Those men who can afford it therefore marry two or three wives. Divorce is not allowed on any ground but that of infidelity. At a divorce the caste committee direct that a piece of the husband's *pagri* should be cut off and the woman's *anchal* or that part of her cloth which covers her breasts. The term *anchal katni* has thus come to be used to signify a divorce. The Kurmis eat flesh, but when they become *Gurmukh*, or adopt a Brāhmaṇ as their *guru*, they give up the practice. The Kāchhis and Mālis grow vegetables and garden crops on small patches of land, which they irrigate with great assiduity. Formerly they derived large profits from growing opium.

71. The Ahirs (11,000) are cattle-graziers, but they own
Ahir. 25 villages, of which 17 belong to Rao

Bahādur Nirbhaya Singh Mandloi. At their weddings the bride is taken round and stands in front of every guest's leaf-plate and he then gives her a pice. Her father-in-law takes her on his lap and gives her an anna and the feast is then begun. Like milkmen in other localities, the Ahirs are always accused of watering their milk and the people say that when a Gaoli goes out to sell milk, he deposits his honesty in a niche of the house, after which he is free to lie to any extent. On his return he calls it back and after that he will not tell lies. The principal festival of the Ahirs is the Diwāli, when they go round dancing and

HOSHANGABAD. POPULATION.

singing in a fantastic dress, and receive presents from those whose cattle they tend.

72. The Deswālis number 4000 persons. They were members of the Mīna robber caste of Deswāli. Central India, but they have abandoned their old designation to which an evil notoriety attaches. Sir A. Lyall says of this caste :—‘ We can plainly perceive ‘ that the whole tribe is nothing but a cave of Adullam which ‘ has stood open for centuries and has sheltered generation ‘ after generation of adventurers, outlaws, outcastes and ‘ refugees generally.’ The Deswālis of Hoshangābād are peaceful cultivators and labourers. They may be known by their peculiar method of tying the head-cloth and by their manly gait and harsh tone of voice. They wear *lahengās* or skirts and not *sāris*.

73. The Gonds number 49,000 or 11 per cent. of the population, being the most numerous caste. They are also the largest land-holders next to Brāhmans, owning 240 villages. The District was formerly included in the dominions of the Garhā-Mandlā Gond house, and extensive estates are still held by old families of the tribe, of which the principal are those known as the Rājās of Fatehpur and Sobhāpur. The two main divisions of the tribe are the Rāj-Gonds or aristocracy and the Dhur or dust Gonds, the plebs. The Rāj-Gonds have adopted the religious and social observances of the Hindus and wear the sacred thread. Elliott states that they even outdo Hindus in the elaboration of some of their ceremonies and for fear of defilement have the wood with which they cook their food washed before it is burnt. But once every four or five years the Rāj-Gond must visit his god Burā Deo and place cow’s flesh to his lips, wrapped in a cloth lest evil should befall his house.

74. The Korkūs number 23,000 persons or 5 per cent. Elliott’s Monograph of the population and own 80 villages. on the Korkūs. But the recent transfer of territory to

Nimār has reduced the numbers of the tribe. Sir C. Elliott's Settlement Report contains in an appendix a detailed description of the Korkūs which may be termed classical. Space does not permit of its reproduction in full, but the following is an abridged version. It must be remembered that the account was written forty years ago, and allowance must be made for some progress in the adoption of Hinduism and the abandonment of their ancient customs by the tribe during that period :—

75. The gods worshipped by the Korkūs are the following. Every village has three gods,

Their religion.

Dongar Deo, the god of the hills, resides on the nearest hill outside the village. He is worshipped every year at the Dasahra with a goat, 2 cocoanuts, limes, 5 dates, and a ball of *sendur* paste. He is the *khedāpati* or especial village god. Mutuā Deo is a heap of stones inside the village : he receives the same offerings but a pig is given him instead of a goat. His peculiar mission is to send epidemics and fevers, and he is specially propitiated in the same way. The goddess of small-pox, Māta, also resides in the village, and receives offerings of cocoanuts and sweet-meats, but no blood. Besides these, which exist in every village, there is a Kur Deo, who presides over the growth and health of children of three or four villages together. Lāla Hardaul (the cholera god), Hanumān, and Bāgh Deo, the tiger god, are found in some villages, but not in all. Hanuman is the only one of whom any representation, however rude, is attempted ; the rest are only large stones under trees, or, in the case of Mutuā Deo, a heap of small stones besmeared with *sendur*. Besides these visible deities, two invisible ones are much worshipped. Bhainsā Sur, the patron of sorcerers, is also the lord of every wheat field, and is worshipped there at the first ploughing time with a ball of *sendur*, at sowing time by the slaughter of a pig, and at reaping time with ears of corn. Sūrya Deo, the sun, is the Kul Deo or tribal god of the Korkūs in particular;

they do not, however, give libations to him, as Hindus do, but once in three years the head of each family, on some Sunday in Māgh or Baisākh (January or April), offers outside the village, a white she-goat and a white fowl to him, with face turned to the east.

76. The priests of the Korkūs are of two kinds, *pari-*

Tribal priests. The Parihār and Bhumkā. *hārs* and *bhumkās*. The *parihār* is here, as elsewhere, the man who is visited with

the divine afflatus of any god, and

through whose mouth the god speaks. He is, so to speak, the prophet, not the priest : consulted on special occasions, but not the performer of routine ceremonies. He is, besides, rare. Every village has its *bhumkā*. He it is who performs the yearly sacrifice to the village gods, or the special sacrifices entailed by the anger of any particular god, as shewn in disease or misfortune. On him devolves the dangerous duty of keeping tigers out of the boundaries. When a tiger visits a village, the *bhumkā* repairs to Bāgh Deo, and makes his offering to the god, and promises to repeat it for so many years, on condition the tiger does not reappear for that time. The tiger on his part never fails to fulfil the compact thus silently made by his lord, for he is pre-eminently an honourable and upright beast, 'pious withal,' as Mandeville says, not faithless and treacherous like the leopard, whom no compact can bind. Some *bhumkās*, however, masters of more powerful spells, are not obliged to rely on the traditional honour of the tiger, but compel his attendance before Bāgh Deo,—and such a *bhumkā* has been seen, a very Daniel among tigers, muttering his incantations over two or three at a time as they crouched before him. Still more mysterious was the power of a Kālibhīt *bhumkā*, now, alas ! no more (he died the victim of misplaced confidence in a Louis Napoleon of tigers—basest and most blood-thirsty of the race),—who had a fine large *sāj* tree into which, when he uttered his spells, he would drive a nail. On this the tiger came and ratified the compact with his enormous paw, with which he deeply scoured the bark.

Much such a sign-manual was that of Timūr the Lame, when he dipped his mighty hand in blood, and stamped its impression on the parchment as a *tumghā* grant.

Another occasion when the *bhumkā* is in great force is when a man is sick, and it is desirable to learn what god or spirit of unburied ancestor has sent the sickness. A handful of grain is waved over the sick man, and is then carried to the *bhumkā*. He makes a heap of it on the floor, and, sitting over it, swings a lighted lamp, suspended by four strings from his fingers. He then repeats slowly the names of the sick man's ancestors, and of the village and local gods—pausing between each, and when the lamp stops swinging, the name at which it stops is the deity to be propitiated. Then, in the same way he enquires what is the propitiation offering to be,—a pig? a chicken? a goat? a cocoanut? and so on,—and the same mystic sign indicates the satisfaction of the god. When this point is cleared up, the *bhumkā* presents the required offering, and the sick man gets well.

77. *Bhumkāhood*, or priesthood, does not form a caste among the Korkūs. The son of a Method of choosing
the Bhumkā. *bhumkā* will, *cæteris paribus*, be a *bhumkā*; but the younger son, if there be more than one, becomes a common cultivator, and no sacredness attaches to him. Nor does a *bhumkā* necessarily marry into a *bhumkā* family, nor does it follow that 'Once a *bhumkā* always a *bhumkā*.' On the contrary, the position seems to be the result of the special favour of the gods of the particular village in which he lives, and if the whole of the residents emigrate in a body, then the gods of the new village site have to be consulted afresh as to the servant whom they choose to attend upon them. His perquisites are generally paid in grain, each house giving him 8 *pais* or 9 seers of some *kharif* grain and each threshing-floor a sheaf of wheat or gram, and of rice. But in some villages he is remunerated by every one in the village giving him a day's ploughing, and a day's weeding and a day's wood-cutting gratis. The manner

of choosing a new *bhumkā*, if the old one dies or goes away, or if a new village is established, is after this simple fashion :—All the villagers assemble round the Mutuā Deo, and offer a black and a white chicken to him. A *parihār* should be enticed to grace the solemnity and make the sacrifice ; but if that cannot be done, the oldest man in the assembly performs it. Then he sets a *pai*¹ rolling along the line of seated people, and the man before whom the *pai* stops is marked out by this intervention of the deity as the new *bhumkā*.

78. The chief Korkū festival is the Dasahra, which they perform in Aghan or Māgh (November or Festivals.

January), not in Kunwār (September) because they have then no leisure. The three new moons of Jyeshth, Shrāwan, and Bhādon (called respectively the Bhawai, Jhiroti and Polā) are carefully kept. At the Bhawai the village gods and spirits are worshipped by the *bhumkā* and this is the time of the annual sacrifices to them ; the Jhiroti is merely kept as a holiday, free from ploughing or weeding, and the Polā is celebrated by a solemn drowning, in the nearest water, of the swings on which every one has been swinging all the preceding month. They keep the Holi, but not very carefully ; and on the Diwāli, though they light no lamps, they keep up the custom of frightening the cattle (*dhor bichkāna*). The Akhātij is the day when ploughs are worshipped, the commencement of the agricultural year.

79. Korkūs consider themselves of higher caste than

Social offences. any of the races who surround them, such as Gonds, Nāhals, Chamārs, Basors (bamboo weavers), Moghias (*shikāris*), Telis, etc. Any Korkū who should eat or drink from a vessel belonging to any of these tribes, or to a Muhammadan, would be put out of caste ; but in the case of the Gonds it is lawful to drink from their brass vessels, though not their earthern ones. The offence would be wiped out by a dinner given to his brotherhood, at which one pig, three goats, and seven chickens

¹ A small round measure for grain.

would be consumed. The same penalty would follow his having smoked from the *chilam* of any of these races, except a Muhammadan, Gond, or Teli, whose *chilam* conveys no impurity. Unlike the Gonds, the Korkū can eat food cooked by a Brāhman. The penalty above mentioned is exacted when the fault is committed in ignorance; if knowingly and of malice aforethought, a heavier demand is made on his pigsty and poultry yard. As long as a Korkū lives with a woman of any of the above races, he is outcaste, but on abandoning her he is readmitted after a heavy dinner. For killing a cow or bullock unintentionally, the penalty is a pig, three goats, and seven chickens; for a monkey, a goat; for a kite, five chickens; for a tame cat, seven chickens. No penalty is attached to the slaughter of a wild cat or of a squirrel, nor to hurt inflicted by a tiger scratch; but if worms breed in any wound, then the Korkū, like all Hindu and Gond races, is put out of caste. These are all the accidents I know of that interrupt his social relations with his kind.

80. There are five forms of marriage among Korkūs, all of which, though not equally creditable, appear to be equally binding, and the children of all of which are equally legitimate. They are—(1) regular marriage (*shādi*), with a procession and a dowry; (2) *lamjhānā*, when the son-in-law pays dowry in labour and lives in the father-in-law's house; (3) *bolāni* or Gretna Green, when the girl leaves her father's house for her lover's; (4) *pāt* or widow marriage; and (5) what is much akin to it, marrying another man's wife by mutual consent.

81. First comes the regular marriage, or *shādi*, which is preceded by three preliminary ceremonies. The father having selected a suitable bride for his son, sends two respected men, *pietate graves*, to propose the match to the girl's father. He, as a matter of decorum, invariably refuses it, swears great oaths that he won't let his daughter marry

The regular
marriage.

at all, and that he intends to have a *lamjhāndā* son-in-law, and so on. The two messengers, called *chitūlas*, know better than to despair, and they soon come back again and press their point, but it never takes less than six months and sometimes as much as two years, before the 'stern parent' relents. Generally, however, he is considered to have satisfied the demands of gentility in a year or nine months, and the moment he gives in, the *chitūlas* send for their principal, and for a large quantity of liquor in which to seal the bond, and they call in several residents in the girl's village as witnesses, that he may not go back from his word. Next comes the *sagai*, or betrothal, which is not *de rigueur*, and may be omitted, though, if it is, the friends of the family are too anxious for its credit to allow it to be supposed that the reason for the omission was poverty, and insist on a double feed at the marriage, to make up. The ceremony is a very simple one: a few friends are collected at the bride's house, and the young people's clothes tied together by a corner, in which condition they go round the assembly and salute every body. The chief business performed at the *sagai* (or, if there is no *sagai*, at some meeting) is the arrangement of the *deoj*, or dowry—which is not, however, the sum contributed by the bride to house-keeping expenses, but the compensation paid to her father by the bridegroom for the loss of her services. The sum varies from Rs. 40 to Rs. 80; but Rs. 50 are commonly paid, and the poorest Korkū never pays less than Rs. 40. Wealthy men sometimes refuse this payment, or give a daughter on condition of receiving a bride for one of their sons. Of the *deoj* Rs. 10 is paid at the *sagai*, and the rest ought to be paid before the marriage, or else the bridegroom's father will have a bad time of it at that festival. Māgh (January) and Baisakh (May) are the favourite marriage months, being idle and succeeding to the harvests, so that every one has then a good stock of grain to eat or to sell for liquor.

82. If the father has only one daughter, or if he has serving for a wife. a large establishment and requires some one to look after it for him, he often refuses to marry his daughter, and prefers to have a *lamjhanā*, that is, to give her to a man who, instead of paying the *deoj* in cash, will work it out in his father-in-law's house. Few men will, however, consent to this for themselves and their sons, unless very poor, and it is hard to make the arrangement. The man who agrees to become *lamjhanā*, or to serve for his wife, makes a compact to give his labour gratis for twelve years, and is fed and clothed by the girl's parents. The latter will put off the marriage as long as they possibly can, but if the girl is grown up and is thinking of going to live with some other man, or if an improper intimacy springs up between her and the *lamjhanā* youth, they let them marry. At the lowest, the youth remains nine months or a year in the house before marriage, and at least they get something out of him, for after marriage he is nearly certain to break his compact and set up for himself, and they have no longer any hold upon him. The marriage is a very quiet affair—no procession; the bridegroom's parents are sent for, and a few friends collected to witness it, but everything is done very soberly.

83. If girls were as easy to manage as cattle, the wealth of a Korkū might be measured by the Irregular marriage. number of his daughters, as well as by his bullocks, since each daughter is worth Rs. 40 in cash (say a year's income) or farm labour gratis for several years. But Korkū girls are not less kittle cattle than other womankind, and a father who was intent on driving a hard bargain might come home and find he had reckoned without his daughter. Infant marriages are unknown, and marriages of children very uncommon: the general rule is for the girl to be sixteen and the man twenty years old. If, when the girl has arrived at this age, the father shews himself hard to please, and refuses eligible offers, or if she has fallen in love with any

one in particular (which is said to happen at times), she will leave the house quietly some morning and betake herself to some man's house, with whom she has made arrangements previously. If her young affections have not been engaged, she is generally determined in her selection of a protector by his circumstances and position in life, and there is a great run on men whose mothers are dead. If, however, she favours with a visit a man who does not wish to keep her, his situation is truly pitiable : he dare not turn her out ; if he did, he would be put out of caste by his brotherhood for such a want of gallantry ; but he is obliged to vacate the house himself and leave her in possession. After a time his relations represent to her that the man she wants is not there, and has gone away on a journey, from which he is not likely to return for a long time, and at last she resolves to go back to the paternal mansion. This, however, very rarely happens. The pair have generally come to an understanding beforehand, and she remains mistress of the situation. As soon as her father finds out where she is, he comes in a terrible rage and administers liberal abuse and blows to her and her lover. A tremendous uproar follows, when it is *de règle* for the chief men of the village to appear, to soothe the angry feelings of the injured parent. By degrees he allows himself to be appeased, and at last blesses his children when a rapid abstract of the marriage ceremony is gone through, and the pair are man and wife. A Korkūt may marry any widow of his caste except his younger brother's widow, under the slight penalty of giving a dinner to his brotherhood. If *A*'s wife goes wrong with *B*, and *A* finds it out and beats her, or otherwise makes a disturbance, both *B* and *A* (on his wife's account) have to give a dinner to the brotherhood. If, however, *A* prefers to wash his hands of her and let her go with *B*, then *B* and she both have a lock of hair shaved off their foreheads, and give a dinner, and they are fast married. The children of *A* stay with him, or if unweaned are sent back to him when weaned. *B*'s children

are perfectly legitimate. Similarly, if a man of the higher caste falling in love with a Korkū woman, consents that her gods and her people shall be his, a lock is cut from his head and he is received into the race, and his sons and daughters are pure legitimate Korkūs, though looked at a little suspiciously at first. I believe some of the hill races are to a very considerable extent recruited in this way. If a girl has had a child before she marries, her husband is considered the father of the child, whether he is so or not, and it is legitimate and shares equally with his real sons. There seems to be almost no possible form of illegitimacy so long as a Korkū man or woman consort only with their own race.

84. In inheritance cases, the sons and mother share equally, daughters receiving nothing.
 Inheritance. The dead are generally buried. Rich men sometimes burn their dead, but this process entails an additional inconvenience beyond the expense of the funeral pile. It is necessary to rescue from the ashes, after burning, seven bones of the deceased, the legs, thighs, arms, and skull and bring them home, and worship them by an offering of burnt *ghī* every day till the funeral rite is performed. This is so laborious a process that very few burn at all. The grave dug is narrow at the top but large enough at the bottom to receive the whole body lying at full length. It is generally about 3 or 4 feet deep, and when finished two pice are first thrown in, to buy the site. Then the body is laid on its back with head to the south, hands at the sides, stripped perfectly naked, but with a sheet over it, and with a rupee or a piece of gold if it can be afforded in its mouth. Then the earth is filled in along with *ber* thorns to prevent the hyenas from digging it up, and stones are placed on the top.

85. The funeral rite, or *sedoli* is performed as soon after
 Funeral rites. the burial as is convenient. Sometimes it is not performed for ten years, and six

months is uncommonly little. Till it is performed the spirit of the deceased has no rest, and is unable to mingle with its peers, but has power to send aches and pains to molest the bodies of its living relations. Then they, being troubled, apply to the *bhumkā*, and he, as above related, divines who is the sender of the pain or disease, and thus the son or descendant is stirred up to set his ancestor's ghost at rest, in order to obtain rest for himself. When the rite has been performed, the spirit has no longer power on the earth, and the only idea I could ascertain that the Korkūs entertained about the spirits of the dead is, that they inhabit a village of their own, much the same as where they lived in life, and lead there a *morne* and colourless existence, devoid alike of pleasure and of pain. Each sept has a place in which the funeral rite of every member of that sept must be performed ; and, however far the Korkū may have wandered from the original centre of his tribe, he must return there to set his father's spirit at rest, and to enable it to join its own family and ancestral ghosts. In this spot a separate stake, called *mūndā*, is set up for everyone, whose rites are separately performed ; and if a poor Korkū performs them for several ancestors at once, he still puts up only one stake. It stands about 2 or 2½ feet above the ground, planed smooth and squared at the top. On one side is carved, at the top, the likeness of the sun and moon, a spider, and a 'human ear ; and below it a figure representing the figure of the principal person in whose honour it is put up, on horseback, with weapons in his hand. If more than one person's death is being celebrated, the rest are carved below as subordinate figures. When the *sedoli* or funeral rite is to be performed, the first thing is to cut a bamboo and take out the pith, which is to represent the bones of the deceased, unless he has been burnt, in which case the bones themselves will have been preserved. A chicken is then sacrificed on the grave, and all that night the mourners watch and dance and sing and

make merry. That night is called the *jagner*, or wake. Next day they go out very early and cut down some perfectly unblemished tree, either teak or *salai*, not hollow, or decayed, or marked by axe, which they cut to make the *mündā*. It is brought home and fashioned at once by a skilful man. In the afternoon it is taken out to the place where cattle rest outside the village at noon tide, and is washed and covered with turmeric, like a bridegroom, and a goat and five chickens are sacrificed. It is then brought home again, and the pith representing the bones is taken outside the village and hung up to some tree for safety during the night. All the friends and relations have by this time assembled, and this evening the chief funeral dinner is given. Next day the whole party set out for the place where the stakes of their *gotra* are set up, and, after digging a hole, and putting two pice in it and the bones of the deceased or the pith which stands for them, they put the *mündā* in and fix it upright ; then they offer a goat and chickens to it, which are presently eaten close by, and in the evening the whole party return home.

SOCIAL LIFE AND CUSTOMS.

86. The following description of the people written by Sir C. Elliott forty years ago, merits reproduction on account of its general interest :—

Character of the people.
 ‘The character of the population as a whole is remarkably quiet and peaceful. Races notorious for their turbulence elsewhere lose it on immigrating to this valley, and tribes who were the terror of the country fifty years ago are now thoroughly subdued. The Jät is no longer the litigious, quarrelsome creature he is in the North-Western Provinces, full of family feuds, and ready to baffle to the death for a *biswānsi*¹ of ground ; he has brought his good husbandry and good humour with him, and has left his suspicious temper behind. The Güjar is totally changed from the

¹ About 9 square yards.

' graceless, rieving, lawless scoundrel he is elsewhere, and has become the most pious of cultivators and never once dreams of the way in which his ancestors lifted innumerable head of cattle, and his cousins lift them now. Indeed, considering the great herds of cattle, and the loose way in which they are allowed to graze over a thousand hills, it is astonishing that cattle-theft is so little practised. Yet in the last three years only 215 cases of the kind have been reported, of which no doubt the majority were merely cases of cattle straying. But the most remarkable change of all has taken place, not in the tribes which have immigrated into the District, but in the aboriginal inhabitants of it, the Gonds and Korkūs. I have briefly referred, in my historical chapter, to their plunderings and the terror they inspired. In early reports and accounts we read a great deal of the "Savage Goands" (a way of spelling their names which gives an enhanced idea of their ferocity), and of their turbulence and daring. I can hardly do better than quote a passage from a report by Major Henley, Political Agent at Sehore in 1820, in which he describes the impression made upon him by their appearance and character, and his hopes of their future improvement. He says, "The capture of Asīr, the extraordinary fate of Chitu, the settlement of the Bhils to the southward and the perfect tranquillity that prevails in Mālwā, have made an impression even on those savage and intractable foresters, which I trust will last, till, by testing in some degree the benefit of their ameliorated condition, and contrasting the comforts of peace and comparative competency with the wretchedness of a life of constant danger and privation, they will become gradually susceptible of the habits of civilization." This description, and the phrase "savage and intractable foresters," seems to us now ludicrously inappropriate to the timid, docile creatures with whom we have to do; and this very inappropriateness is an adequate test of the great change which has passed over them.'

87. Mr. Sly remarks as follows on the people¹ :—

Cultivating castes.

'The Rājputs are the most numerous of

'the Hindu cultivators, of about the
'average in skill and enjoying a high standard of comfort.
'The Kurmīs generally possess large holdings, which they
'till with care and industry. A Kurmī village is nearly
'always prosperous. The Pardesi Kurmīs who cleared the
'forest and settled round Itārsi are the best cultivators in the
'District, and their women do not despise the labour of the
'fields. The Brāhmans are an important power in the
'District, and although few of them cultivate with their own
'hands, they hold much land both as proprietors and tenants.
'The Gūjars are one of the oldest cultivating castes, and are
'a fine set of men and fairly good agriculturists, though
'inclined to be quarrelsome and litigious. The Kirārs, who
'are numerous in eastern Sohāgpur, are not such good culti-
'vators, being wanting in energy and skill. The Lodhīs and
'Lodhās are good cultivators and a thriving community.
'The Kāchhis and Kirs are the only castes who carry on garden
'cultivation and even they have lost much of their hereditary
'cunning. The Jāts and Bishnois are late immigrants from
'Dholpur, excellent cultivators and celebrated for the care
'with which they prepare their land. The Baniās own many
'villages and holdings. The bulk of the Muhammadans are
'Julāhas and Pinjārās, whose principal occupation is weaving
'with occasional subsidiary cultivation. There are a few
'good families who formerly held military posts under the
'Mughals and Bhopāl, but several of them have already lost
'their villages. The old Gond Rājā of Hoshangābād, who
'still holds a few muāfi villages, became a Muhammadan on a
'visit to the paramount power at Delhi, and this has resulted
'in the extraordinary anomaly, that while the family are all
'Muhammadans, the daughters marry Rāj-Gonds, and the sons
'also take their wives from Rāj-Gonds, who are converted to
'Islām after marriage.'

¹ Settlement Report, para. 81.

88. The house of a landowner or well-to-do trader is built on one side of a quadrangle, the Houses. other three sides being closed in by the cattle and cart-sheds and by the granary or *bandā*. The main or front block is often double-storied, is covered with tiles and is always substantially built. The plinth is about three feet high and the superstructure is erected in sections of burnt or unburnt bricks held together from the foundation upwards by a framework of timber. Usually a verandah, the wooden supports being often carved, opens out towards the street or lane. The timber of the walls, the main beams, posts, door-frames and roof-tree is of teak, while the floor and partition-walls, if any, may be of teak or inferior timber as *sāj* (*Terminalia tomentosa*), *jāmun* or *haldu* (*Adina cordifolia*). The tiles rest immediately on split or whole bamboos laid parallel across some rafters and tied together. In the poorer class of habitations the houses are built of mud raised inside a timber frame-work fixed in the ground, while those of labourers consist merely of a one-roomed thatched or tiled hut, the walls being of wattle plastered over with clay or a mixture of clay and cowdung. The interior of the houses is kept clean by a lavish use of cowdung, which for a time deters insects from breeding in them. The metal eating and drinking vessels are made bright by a lavish use of ashes and clay. The houses of Korkūs¹ are arranged in two long rows. If the village is in the forest, it usually stands on elevated ground, the average hill village containing about twenty huts. They are built of 'wattle and daub,' with a loose grass roof. It is the custom to bind the huts so closely together that a forest fire often sweeps through a whole village before one of them can be removed to check its cause. The average hut is about fifteen feet square with a flat earthen roof for thatching. When the

¹ The following sentences are taken from a monograph on Korkūs by Mr. H. R. Crosthwaite, Assistant Commissioner.

grass is well laid on over a good layer of leaves and pressed down evenly and firmly by the outside poles, the rain is kept out as effectually as by a regular thatch.

89. In Sir C. Elliott's time the staple food of the people was wheat, but since the export

Food.

trade in wheat grew up, it is much less

eaten by the ordinary cultivator, juār and the inferior millets having been substituted for it. He described the food of the people as follows :—‘The food of the District is almost entirely wheat. In Rājwāra and Chārwa where a good deal of *kharī* is grown, the people eat kodon, kutkī and juār for about four months in the year; but where only wheat, gram and the other spring pulses are raised, these constitute the staple food. The cultivator or labourer generally eats three times a day. He has his most substantial meal in the early mornings before he goes to work—cakes of wheat flour or wheat and gram mixed, or juār with pulse and a little *ghī*. Having consumed as much as he wants, he takes the rest with him and eats it cold in the field at about 2 P.M. On coming home in the evening he gets a second hot meal, either of *dulia* (wheat broken up and boiled), or boiled rice or kodon-kutkī with green vegetables, pepper and chillies. In the sowing season, however, the ploughman is not allowed to come home at all, his wife brings him two hot meals to the field, and he eats half hot and half cold, making four meals a day; the herdsman or the owner of the field is always by, and takes the plough while he eats, so that no time may be lost. When there is no work to do in the field, the cultivator eats his chief meal at noon, and takes a light refection in the evening. A seer of rice or wheat flour, or one and a quarter seers of juār are reckoned the average food of a hardworking able-bodied man.’ Nearly all men smoke tobacco, but very few women, except among the lower castes. Both men and women take snuff. Opium is taken in the form of pills, but *madak* smoking is generally confined to bad characters. Hindus of the higher castes often drink *bhang* as a stimulant,

while the lower classes have country liquor. It is interesting to note that several persons, who lost their caste in 1897 by taking food in the poor-house, have become Bairāgis and are now respected as religious mendicants.

90. The fashion of dress is becoming more uniform, and local or tribal peculiarities are disappearing. Cultivators wear a short coat and *Dress.* *dhotī* or loin-cloth. In the Hardā tahsil many women wear a long skirt or *lahengā* reaching to the feet ; women of the other tahsils have the ordinary *sāri*. Married women have a bodice (*angia*) to support the breasts, which is tied behind. A girl may not wear an *angia* until she is married, but among the Marāthā Brāhmans and other Deccani castes small girls have a *cholī* or breast cloth tied in front, or a *kacholi*, a small piece of cloth simply done up in a knot at the back. In the villages children go naked till they are four or five years old. In the Hardā tahsil most cultivators wear a *pagrī*, consisting of a piece of cloth 3 or 4 inches wide and 150 to 200 feet long. The larger a man's *pagrī* is, the more respectable he is considered. Elsewhere the *dupattā* or short cloth 3 feet wide and 9 or 12 feet long is worn. This is folded simply round the head and may be tied every day by the wearer himself. But the tying of a *pagrī* is a special art and a fee of four annas is usually paid to the person employed to do it. It is only tied once and is then worn till it comes to pieces. The *pagrīs* worn sideways with a peak in the centre are of Indore. Those with a peak in front are of Delhi. A Marāthā Brāhman's *pagrī* has a roll in front, rising off the forehead, and this was formerly a distinctive mark by which he could be known. But in these days of liberty other castes such as the Agarwāl Baniās have taken to wearing the Brāhman's *pagrī*. Hindus as a rule wear the hair short with the exception of the *chotī* or scalp-lock and a common custom is to shave a rectangular space on the crown of the head. Officials and students often have the hair simply cut short like Europeans. The Jāts of the Hardā

tahsil wear beards and long hair. Elliott remarks :—¹ ‘We come next to the cultivating classes who immigrated from Mārwar through Handia—the Gūjars, Jāts, Rājpots and Bishnois. They are generally recognisable by a greater luxuriance of hair and beard and a milder look in the eyes; and sometimes you may notice in their speech that singular substitution of *h* for *s* which is the reason why the country of the Sind is called Hindustān to the present day. This description, however, applies chiefly to the Rājpots, Bishnois and Jāts, not to the Gūjars who are carefully trimmed and shaved.’

The Korkū, Mr. Crosthwaite says,² wears little clothing, but is extremely fond of ornaments. The men wear a low turban or frequently no turban at all. A large brass chain is often worn in the turban or attached to the waist, and to it is appended the flint, steel and small dry gourd full of cotton, which are the implements for obtaining fire. It is also common to wear a large brass ring in one ear. The women are loaded with cheap ornaments. Banks of beads surround the neck and cover the chest, flowers sometimes deck the hair, while arms and legs are literally weighed down with brass and iron.

Among the Hindus the men now wear few ornaments and the educated classes are rapidly giving up the custom. Traders usually wear gold ornaments if they can afford it both for the sake of adornment and for the substantial air of prosperity which is thus conveyed to them.

91. Residence in the Central Provinces has produced some slight differences of custom among Marriage. the people as compared with those of the same castes in Northern India. Newcomers are apt to look with suspicion on those who have been long settled here and to be chary of social intercourse with them until they

¹ Settlement Report, para. 16.

² From a manuscript monograph on Korkūs drawn up for the Ethnographic Survey.

have demonstrated their orthodoxy. The general rule is that the members of a caste or subcaste who have lived in the Central Provinces for a couple of centuries, do not intermarry with their fellows at the home of the caste. Marriage takes place in the same months as in Northern India and with almost the same ceremonies. The age of marriage has a strong tendency to rise among the educated classes as it is obviously inconvenient for a boy to have this tie while he is at school or college. But the cultivator still takes a pride in marrying off his daughters as little children, feeling then that he has done his full duty by them. The higher castes always have the horoscopes of a prospective bride and bridegroom compared as a preliminary ceremony, and if these are unfavourable, the match is broken off. Among the lower castes the names of the boy and girl are given to the Jyotishi Brāhmaṇ and after counting on his fingers he states whether the stars are favourable or not. In the latter case the names of the couple are changed until a favourable conjunction is arrived at. The betrothal consists in the presentation of a rupee, a cocoanut and some sweetmeats to the bride by the parents of the bridegroom. The marriage shed must be built with eleven uprights. The procession consists of the male relations and friends of the family with musicians and sometimes a dancing-girl. Forty years ago Elliott noticed the lavish expenditure on weddings, as follows :—‘Owing’ to ‘the wealth which high prices have brought into the District, ‘weddings have been very numerous for the last two years. ‘The absence of work at the marriage season causes numerous ‘invitations to be sent out and great crowds of guests to ‘collect at the weddings even of proprietors of very inferior ‘position or of cultivators. If a wedding takes place in a Gūjar, ‘Jāt, Raghuvansī or Kurmī proprietor’s family, there will hardly ‘be less than 1500 or 2000 guests of his own caste gathered ‘together ; and if he is a Nāramdeo, the number will be still

'larger.' On the subject of widow remarriage Elliott writes¹ : 'Except Brāhmans, Baniās and Rājputs of pure blood, every caste allows widow marriages, and neither the woman nor the offspring of such a marriage are at all looked down on. The only restriction is that no caste allows a man to marry a widow of a younger brother, and it is very uncommon to marry an elder brother's widow.² Nothing can show more convincingly how natural the practice is thought and how little the widow is subject to the cruel laws of Manu, than the following proverb :—“ If the clouds are like partridge feathers and if a widow puts lamp-black to her eye, the one will rain, the other will re-marry ; of this there can be no doubt.” Perhaps the great liberty allowed for re-marriage may be connected with the greater influence and independence possessed by women here as compared with Upper India. This is shown especially in the custom which prevails of allowing women a share in the inheritance of real property.' Thus Elliott gives instances in which a mother was allowed an equal share with the sons in the succession to real property. Expenditure on funerals is only second to that on weddings, and the priests encourage the idea that the soul of the deceased is benefited in proportion to the magnificence of his obsequies. In the case of old men, musicians precede the corpse to the bier. When the body is nearly burnt, each of the persons present throws five sticks generally of sandalwood into the fire. This ceremony is known as the *panch lakaria* and perhaps has the same idea as that among Europeans of throwing a little earth into the grave. Among some of the Hindustāni castes, when the body is nearly consumed, the fire is put out with handfuls of water, and the remaining unburnt portion thrown into a river to be devoured by fishes and tortoises. The place where the body was burnt is then washed.

¹ *Ibidem*, para. 82.

² This statement is perhaps doubtful.

92. Akshaya Tritiyā on the 3rd day of Baisākh sudi (May-June) is the commencement of the agricultural year. A cocoanut is offered to Hanumān in the village temple, and the field is worshipped, a little water and rice and vermillion being thrown on it, while a cocoanut is broken and distributed to the farm-servants. When cultivation is beginning, a branch of the *palās* tree is taken and planted and the earth is built up round it. A *haslī* or silver necklet is put round the branch and the *hom* sacrifice is performed. Everyone takes a piece of the earth home. Then all go to the mālguzār's house and he gives two of the leaves to each bullock and distributes sugar to the cultivators.

Customs of cultivation.

93. A Brāhmaṇ is always consulted to fix a day for sowing. The poorest cultivator will not begin except on a *muhūrat* or auspicious day. The calculation of such *muhūrats* is, however, a simple matter ; every village *parsai* is able to give them and a very small reward contents him for his pains. Of the twenty-seven sidereal days thirteen are auspicious and of the seven days of the week, only two, Tuesday and Saturday, are of malign influence. Practically speaking, sowing need never be delayed on superstitious grounds for more than three or four days after the completion of the *pushtarnī* (the last bakharing). It cannot be begun before the Dasahra, but the ploughing is hardly over by then and the cold weather has only just begun. When commenced, it should be pressed on and finished, if possible, in thirteen days. *Nauterwa* is the term used by cultivators to express the nine days of Asārh and the thirteen days of Kārtik which are most favourable for sowing the autumn and spring crops respectively. It is universally believed that the produce of the seed sown on these thirteen days is much greater than that of the later sowings. No doubt the longer the sowing is delayed, the drier and less productive the ground becomes. Asārh is the great

month of the year for finishing the preparation of the fields and the proverb says :—

Asārh kā chūka kisān

Dāl kā chūka bandar

or ‘A cultivator who misses ploughing his fields in Asārh is as bad as a monkey who misses the branch of the tree he is jumping to.’

When sowing is over, its completion is celebrated by the *machhandrī pūja* or worship of mother earth, a ceremony meant to invoke fertility. At the edge of one of his fields the cultivator puts up a little semi-circular or three-sided wall of clods, about a foot high, meant to represent a hut. This is covered over with green *kāns* grass as if it were thatched. Two *torans* or garlands of leaves are hung at the sides. In the centre of this little house which represents the temple of mother earth, a little fire is made and milk placed on it to boil in a tiny earthen pot. It is allowed to boil as a sign of abundance. While this is going on, the ploughmen who are all collected in the field drive their ploughs at a trot, shrieking wildly ; it is the end of the year’s labour to the bullocks. The cultivator meanwhile offers a little rice, *gur* (molasses) and *kunku* or red powder to *Machhandrī* and then makes two tiny holes in the ground to represent *bandās* or granaries, drops a few grains of wheat in and covers them over ; this is a symbol of prayer that his granary may be filled from the produce of the land. The bullocks are then let go and the ploughmen run off at top speed across country, scattering *ghogtī* or wheat boiled whole as a sign of abundance.

94. At the close of reaping when a small patch of corn
Reaping. is left in the cultivator’s last field, the
reapers rest a little. Then rushing at this

piece of corn, they tear it up and cast it into the air, shouting out the name of their favourite deity. It is then made into a sheaf, stuck on a bamboo, placed in the last harvest cart and driven home in triumph. It is afterwards bound to a tree by the threshing floor or in the cattle-shed where its services are

essential in averting the evil eye. The underlying idea in this is that the last handful of corn contains the corn-spirit and the same belief prevails in many parts of the world. In Kent it is called the Joy Girl and in Perthshire the Maiden. Many and various customs are practised in regard to it.¹ At harvest, especially in Hoshangābād, a lavish distribution of presents of grain is made to the village menials and others. On that day the cultivator for once in the year is a lordly dispenser of bounty. The Brāhman, Nat, Gosain and Fakir come and beg of him in their sacred character. The Dhimar brings him some waternut, the Teli some tobacco or oil, the Kāchhi some chillies, the Baniā some raw sugar, the Kumhār a pipe-bowl, and each in return receives one or two handfuls of grain. A considerable proportion of the harvest is often expended in this manner, and it is said that one Brāhman who subsists by begging paid 10 rupees income-tax a few years ago.

95. Threshing generally goes on simultaneously with reaping unless the cultivator is too short-handed.

Before it is begun the god of the threshing-floor is placed inside it ; he is represented by a stone daubed with vermillion. A pot of water from a sacred stream is also placed here to scare away evil spirits. The threshing-floor or *khallā* is usually surrounded by a high strong fence and a cattle-shed is placed inside it, and it is a much more durable and substantial affair than in Upper India. In the centre is a small stake, deeply planted in the ground, not without religious ceremonies, and round it the wheat is arranged so that its length may be equal to the line of bullocks who are to tread it out, and its depth such that it nearly reaches the belly of the bullocks. The cattle are fastened to the stake in a line, six or eight or even twelve in a row and driven round and round with the off shoulder outwards so that the man who drives them has his whip hand outside. At first they are muzzled, but when the straw begins to be broken up and the grain to fall to the bottom, the muzzle is taken off.

¹ Frazer, *Golden Bough*, ii, p. 171 et seq.

During threshing-time, if any beggar comes to the ground, he must be given some grain to propitiate him or he will cast the evil eye on the crop.

96. Winnowing is a very solemn and important operation, not lightly to be commenced without Winnowing. consultation of the stars. It seldom begins before all the threshing is over in the village, and all cultivators, or almost all, begin together. If the threshing is over before the end of Chait (March-April), the tenth and the twelfth of the light half of that month are always auspicious days, but if it cannot be begun then, the cultivator must wait idly till the Akti, for all the next fortnight (the dark half of Baisākh) is subject to the most malign influences. The winnowing place is cleaned and plastered with cowdung and a circle made of ashes into which none may go with his shoes on. When the village priest has given the *muhūrat* (auspicious time), the cultivator and his family go to the threshing-floor and washing the stake (*mend*) with water, make offerings to it and to the heap of threshed grain. The boiled wheat, etc., is sprinkled about in the hope that the *bhūts* (spirits) may content themselves with it, and not take any of the harvested corn. Then the master stands on the three-legged stool, and, taking five basketfuls from the threshed heap, winnows them. After winnowing, the grain and chaff are collected again and measured and if the five baskets are turned out full, or anything remains over, it is a good omen; if they cannot fill the baskets, the place where they began winnowing is thought unlucky, and it is removed a few yards to another part of the *khallā*. The five basketfuls are presented to a Brāhmaṇ, or distributed in the village—not mixed with the rest of the harvest. After this the winnowing can go on whenever it is convenient, and whenever a good wind blows. No artificial means are ever employed for making a blast. One precaution has, however, to be taken as long as winnowing is going on, the basket must never be set down on its bottom, but always upside down. If this were not done, the spirits would use

the basket to carry off the grain. Three men are employed in winnowing : one fills the basket, one empties it, standing on the ~~slop~~, and the third sweeps up the chaff and grain into separate heaps. The amount winnowed depends on the wind ; four or five *kachchā mānis*¹ of clean grain is a good average. The day's results are measured generally in the evening. This is done in perfect silence, the measurer sitting with his back to the unlucky quarter of the day (*disāsūl*, the west), and tying knots to keep count of the number of baskets. The spirits rob the grain till it is measured, thinking they cannot be found out, but when once it has been measured, they are afraid of detection. The autumn harvest is winnowed in the same way, but with none of these ceremonies.

LEADING FAMILIES.

97. Most of the leading families of the District formerly Landholding castes. held their estates in *jāgīr* right; but the number of villages so held now is only 32, belonging to the Gond Rājā of Fatehpur-Tekripurā, who is also *jāgīrdar* of Chhāter, and the Korkū Thākurs of Bāriām-Pagāra and Pachmarī, who occupy the hilly tract in the south-east corner of the District. The most important proprietors are the Brāhmans, who hold nearly 500 villages or more than a third of the villages in the District. The Marāthā Brāhman mālguzārs mostly live in the towns of Hardā and Timarnī, and have not a very good reputation as landlords. The Jijhotias and Nāramdeos are more attached to the District and the people. They usually live in their own villages, and amongst them are found some of the best landlords. The Palliwāls and Khedāwāls are money-lenders, pure and simple, who have invested in villages, and their connection with land is purely commercial. Next to the Brāhmans, the most important proprietors are the Gonds, who hold about 240 villages, which nearly all belong to the estates of the

Fatehpur and Sobhāpur Rājās. Most of the smaller Gond proprietors have lost their villages through indebtedness. The Baniās, with 130 villages, which have usually been acquired from impoverished aborigines, come next. They value a village not only for the profits made out of it, but also for the advantages it gives as a field for the extension of a money and grain lending business. The Rājpots and Kurmīs possess about a hundred villages each, but there are no families among them of any special distinction. Korkūs own about 80 villages, most of which belong to the Thākurs of Bairi, Bāriām-Pagāra and Pachmarī; as with the Gonds, the small proprietors have been swallowed up. Jāts, Gūjars, Raghuvansīs, Musalmāns and Ahirs each hold from 25 to 50 villages.

98. The most important Brāhmaṇ family is that of the Bhuskute, who hold the Timarnī estate Brāhmaṇ families. as well as considerable property in the Nimār District and in Holkar's territory. The family is about 150 years old and originally came from the Ratnāgiri District in the Bombay Presidency. Its founders were the two brothers, Rāmchandra Ballāl and Nāro Ballāl, who, five generations ago, took service under the Peshwās. The brothers subjugated the country west of the Ganjāl, which was then called the Handia Sarkār, and forced the Makrai Rājā to surrender half his territory. The sternness with which they repressed the wasting raids of the aboriginal tribes, earned them the name of Bhuskute, or "Chopper." Kurhāde or axemen, is another name by which the family is sometimes known, and the axes which are said to have been the instruments of execution, are still preserved at Khargaon and duly worshipped at the Dasahra festival by the Bhuskute and their retainers. In reward for these services the brothers received in 1751 the hereditary offices of Sir Mandloi and Sir Kānūngō in the Sarkārs of Bijāgarh and Handia, with villages and tracts of land rent-free, percentages on the revenue, and rights of taxation. The Bhuskute proved as successful in peace as they had been in war, keeping the

country in order, and settling cultivators from Khāndesh in the uninhabited parts. In 1777, the Peshwā Mādho Rao gave them the fort of Timarnī as a permanent jāgīr. Daulat Rao Sindhia subsequently added two neighbouring villages and two more were acquired either by force or gift from the Rājā of Makrai, the five villages forming a semi-independent jāgīr. Until the thirty years' settlement, the *killedār* or "holder of the fort" at Timarnī exercised jurisdiction in civil, criminal, revenue and other petty cases. These powers were withdrawn at settlement, but the estate continued to be held in jāgīr until the settlement of 1891-96, when the villages were registered as *muāfi* or revenue-free, though the honorary title of *jāgīrdār* was still allowed to be retained. The present head of the family is Rao Bahādur Balwant Rao Bhuskute. He himself resides at Burhānpur, in the Nimār District, being represented at Timarnī by his *killedār*. He is an Honorary Extra Assistant Commissioner and first class Magistrate in Nimār and Hoshangābād Districts. He is an undergraduate and received his education in the Jubbulpore college. He is very popular and universally respected. The title of Rao Sāhib which his father also enjoyed was conferred on him in 1891 and that of Rao Bahādur in 1903. He has been the president of the Burhānpur Municipality and Local Board for about 20 years and was elected Additional Member of the Viceroy's Legislative Council in 1896 and 1897. He is exempted from appearing personally in Civil Courts.

The Sūbahdār family of Bordhā is also historical. They are Kanaujia Brāhmans and originally came from Lucknow, where one of their ancestors held a military post under the Musalmān rule. His son Sūbahdār Benī Ram, more ambitious than his father, came to the south and obtained a post in the Bhonsla army. His talents gained recognition, and he was entrusted with positions of high command in several battles. His chief exploit was the capture of the fort of Hoshangābād from the Bhopāl Governor Chhote

Khān, in 1795.. In return for his distinguished services he was granted a jāgīr of 52 villages in the Bordhā tāluka, with the hereditary title of Sūbahdār. He died without issue, and his brother succeeded to the estate. It was during the time of this man's son that the estate came under British rule. Once more the male line became extinct, and a sister's son succeeded, whereupon the estate ceased to be a jāgīr and was settled in proprietary right. In 1870, the estate was partitioned between two branches of the family, which are established at Bordhā and Takhū, respectively. The present representatives are Mangalī Prasād, grandson of Beni Singh, of Bordhā, and his brother's grandsons, Chandramul and Sitalā Prasād, of Takhū. All are descended through the female line. Both branches of the family enjoy the title of Sūbahdār, which was originally conferred on Beni Singh. Mangalī Prasād takes much interest in education, and gave useful assistance in the famines of 1897 and 1900. His father did good service in the Mutiny. Except that 12 small villages have been declared Government forest, the estate retains its former proportions.

Another good Brāhmaṇ family is that of the Dīwāns of Ganerā, who are Jijhotias. It rose to importance in the time of Param Sukh Dīwān, the great-grandfather of the present representative, Dīwān Lachhman Prasād. At that time the estate, which was conferred on the family by Rājā Raghuji Bhonsla as a reward for good service, is said to have been of wide extent, but mismanagement and litigation have reduced it to five villages.

A more modern family is that of the Dīwāns of Bābai, who are Adi Gaur Brāhmans. Its founder was Girdhāri Lāl, the great-grandfather of Dīwān Daulat Rām Guru, its present head. Girdhāri Lāl is said to have come from Alwar and to have been given a muīfi village by the Bhonsla. The Pindāri raids pressed with exceptional severity on the 66 villages of the Bābai tāluka, and at the first five years' settlement of 1821 they were leased out by Major Macpherson to Girdhāri, who

was probably the only person willing to accept the settlement. The estate has been reduced by mismanagement to 20 villages, in 11 of which inferior proprietors are recognised. It was taken under Court of Wards' management on account of debt from 1877 to 1902.

The Parūlkar family of Hardā is headed by Pandit Krishna Rao, who is an Honorary Magistrate and takes a keen interest in Hardā Municipality. He is a Shenwi Brahman, or Adi Gaur Sāraswat settled in the Marāthā country. The family owns nine villages, of which six have been in their possession for over a hundred years. They were conferred on the present proprietor's great-grand-uncle Bālāji Krishna, who like his uncle Bakshī Bahādur Jeobā Dāda was a commander in Sindhia's army. Bālāji Krishna is said to have commanded a garrison of 25,000 men at Punghāt on the bank of the Nerbudda, where the ruins of an old fortress are still visible. He received the grant for putting down the Korkū disturbances in the Hardā tract, and for defending it against the raids of the Pindāris. These villages are held on half revenue. Govind Rao Narāyan Parūlkar, a member of the family, was formerly in the service of the Holkar Darbār, holding the position of member for the household in the Local Council of Regency.

Another Hardā family is that of the Shukuls, who originally derived their estates from Daulat Rao Sindhia as a reward for their loyalty. The Shukuls are Khedāwāl Brāhmans, and the estates are now partitioned. Formerly the richest family in the tahsil, it has been heavily involved by the dissensions and litigation which preceded partition. The present heads of the two branches are Pandit Mukund-rām, who lives at Hardā, and Shrinārāyan of Bhunnās.

Nandrām Brāhman of Magardhā is a small zamindār owning three villages. His ancestor Kadū Patel is said to have killed one Hira in battle with Bhopāl, for which Mudhoji Bhonsla gave him a village revenue-free. The family rendered good service during the raids of the famous

dacoit, Tantia Bhil, and spent considerable sums on the upkeep of a force to capture him. Nandrām was temporarily made an Honorary Magistrate during this period. He ultimately became involved in debt, and the estate was taken under Court of Wards' management in 1895. The debts were wiped out and the estate relinquished in 1907.

Sukhdeo Seth is the head of a well-to-do and much respected Hardā family. He is a Nandwāna Brāhmaṇ from Mārwār, and his father Jagannāth settled here in the time of Sindhia, from whom he received five villages. The family estate now consists of 27 villages in Hardā and the Nimār District.

99. The Gond Rājās of Makrai, Fatehpur and Sobhāpur are of the same sect or clan, and in all probability belonged originally to one family ; but they seem to have separated at a very early date. Makrai has been recognised as a Feudatory State, and though under the supervision of the Deputy Commissioner of Hoshangābād, does not properly belong to the District, and is not, in fact, included in British India. Some account of the Makrai Rājās will, however, be found in Chapter II and in the Appendix.¹ The Fatehpur family has again divided into three branches, distinguished by the names of the three hamlets, Nadipurā, Tekripurā and Bichpurā, which they respectively inhabit.² The head of each branch bears the hereditary title of Rājā, which was conferred on them by the Gond Rājās of Mandlā, from whom they acquired the bulk of their estates. The head of the Tekripurā branch is also jāgīrdār of Chhāter. The family traces its descent from two brothers, Ali Shāh and Mahārāj Shāh, who are claimed to have received the Fatehpur and Makrai jāgirs in the 10th century A. D. The Fatehpur estate was then very extensive, and included the Bāra and Shāhpur parganas of the Narsinghpur District. At the end of the 12th century, a younger son, from whom the Gangai and Chīchli

¹ See para. 35 above and Makrai in Appendix.

² See Fatehpur in Appendix.

Rājās are descended, is said to have separated from the present stock and taken these *tālukas* with him. Four hundred years later, the Tekrīpurā branch separated and received on partition 45 villages as a third share. The family estates were increased in the 18th century by grants from Narind Shāh of Mandlā and Rājā Bakht Buland of Deogarh, as a reward for good service in the suppression of two Pathān mercenary leaders, who had established themselves as independent chiefs in the Dudhi valley. It was at this time that the Sāndia Chaurāsi (or estate of 84 villages) and the Chhāter jāgir are said to have been acquired by the Bichpurā and Tekrīpurā families. Further details of the early history of the Fatehpur family and the evidence on which it is based will be found in Mr. Elliott's Settlement Report, Chapter II, paras. 11 and 12. Under Marāthā rule the Rājās were continued in possession of a large portion of their estates, which, in spite of their doubtful loyalty in the years 1857-60, they have been allowed to retain. The estates have suffered a good deal from extravagance and mismanagement, and periodically come under the control of the Court of Wards. They are, however, still very considerable, and yield large incomes. The Nadīpurā family, the present representative of which is Rājā Lāl Komal Singh, owns 54 villages in the Sohāgpur tahsil, together with 28 villages and 11 shares of villages in the Gādarwāra tahsil of the Narsinghpur District. The estate came under the management of the Court of Wards in 1898, but it is solvent and is now relinquished. Rājā Prahlād Singh is head of the Tekrīpurā branch, and jāgirdar of Chhāter. He holds 13 villages in jāgir, and in addition 45 villages in the Sohāgpur tahsil and 9 villages in Gādarwāra. The estate has been under the Court of Wards since 1893, on account of debt. The Bichpurā branch of the family is now represented by Rājā Takhat Singh, who manages his own affairs; his estate consists of 60 villages in Sohāgpur, and two villages in Gādarwāra. He is exempted from appearing personally in Civil Courts. The Sobhāpur Rājā follows the Fatehpur lead in professing to have been settled

here for 900 years; but his house is really much inferior in antiquity and power. He has no deeds of any kind, and there appear to be no historical allusions to him. The common tradition is that his ancestor Nawal Shāh was a small Thākur, owning eight villages, when he married a daughter of the Bairī Rājā whose other daughter was married to the Rājā of Mandlā. Nawal Shāh's wife bemoaned her hard fate in being only a Thakurain, while her sister was a Rāni, and at last she persuaded her father to give the title of Rājā to Nawal Shāh. This was only about one hundred and fifty years ago. Soon after Nawal Shāh obtained a lease of the Bāra pargana, from which in those disturbed times he carved out the estate, or Chaurāsi, which his descendant holds. The estate now consists of 74 villages, all in the Sohāgpur tahsīl. The present representative, Rājā Umrāo Shāh, has been under the Court of Wards since 1890, partly for debts and partly on account of youth; but it is expected that the estate will very shortly be relinquished. It may be added that in many of the villages belonging to these Rājās, an inferior proprietor has been recognised.¹

Rājā Kāmran Shāh of Hoshangābād is also a Rāj-Gond but he has embraced the Musalmān faith. The title of Rājā is hereditary. The family possesses only five villages, three of which are in the Bhopāl State. The two villages in Hoshangābād are held in *muñfi* right and were granted by the Bhonsla Rājā for military service. Kāmran Shāh is reputed to be a good native physician and takes great interest in preparing and distributing medicines without remuneration. He is an Honorary Magistrate.

100. There are two Korkū families of note in this District. The more important is that of the Korkū families. Thākurs of Bairī, who received the hereditary title of Thākur Senai Rai from the Mughal Emperors. The family is probably very old, but they have no records of

¹ See Chapter VIII, para. 206.

their antiquity. When they first left their native country near Dhār (for their boast is that they are allied to the Ponwār Rājputs by blood), they settled at Jogā and from it obtained possession of the estate they now hold. Jogā is a fairly modern Mughal fort in the Nerbudda river, and it seems not improbable that when the Mughals were becoming weak in Mālwā, towards the end of the 17th century, they may have given the jāgīr to the ancestor of this family, to hold the fort as their feudatory, or simply to bribe them into good behaviour. If the latter was their intention, it was remarkably unsuccessful; for no doubt the advantages of their position assisted in making them the notorious robbers which they subsequently became. During the Mutiny, however, this family rendered good service to the Government. The estate, which is no longer a jāgīr, now consists of 35 villages; but recently it has become indebted and from 1896 to 1907 was under Court of Wards' management. The family has two branches, one headed by Thākur Jaswant Singh, who lives at Bairi, and the other by Thākur Ratan Singh, who is established at Dhangaon. In 1907 partition was effected. The estate of the Bairi branch, consisting of 21 villages, is still under Court of Wards' management.

The jāgīrdār of Bāriām-Pagāra, who is a Muāsi Korkū, has an estate of 14 villages, lying deep in the Sātpurā hills in the south-east corner of the District. Two of the villages are in the Chhindwāra District. The family probably does not date further back than the 18th century, when the estate together with the title of Thākur was bestowed on it by the Rājā of Deogarh on a service tenure, whereby the jāgīrdār was required to keep the roads to the Mahādeo shrine open for pilgrims. The Mārathās allowed the estate to remain on the same tenure, and under British rule both the jāgīr and the title of Thākur have been continued. The present head of the family is Thākur Ratan Singh, who also holds two villages in ordinary proprietary right in the Sohāgpur tahsil, in one of which, Dābka, he ordinarily resides.

Another Korkū family connected with the District is that of the jāgirdār of Pachmarī, who, in caste, tenure and title resembles his neighbour of Bāriām-Pagāra. With the exception of five small villages, however, his estate lies in the Chhindwāra District, from which it has always been administered.

101. Among other distinguished families may be men-

Other families.

tioned that of the late Rao Bahādur Nir-

bhai Singh Mandloi of Shohpur.¹ The

family is Ahīr by caste and owns 13 entire villages and shares in 9 others in the Seoni tahsil. It claims descent from one Pūransingh, who joined the army of Firoz Shāh Tughlak in the middle of the 14th century, and won a jāgīr from him, but the estate is now held in ordinary mālguzāri right. The late Rao Bahādur was well known as a charitable and religious man, and in addition to his own estate used to manage the villages belonging to the Gosain Math, or convent, of Gondāgaon. The title of Rao Sāhib was conferred on him in 1892 and that of Rao Bahādur in 1903 in recognition of his public spirit.

Maulvi Mazar-ul-Mahmud of Kharpābar is the grandson of Maulvi Mazhar Jamil, who was Extra Assistant Commissioner at Hardā in the time of the Mutiny and for his conspicuous loyalty was granted the Māla estate in the Damoh District as a jāgīr. This is now held by another branch of the family. The tomb of Mazhar Jamil at Hardā is still venerated. His second son Hibz-ul-Kabir was presented with a hunting knife by the Duke of Edinburgh when he visited Kharpābar. He was appointed a first class Sardār to His Highness Mahārājā Tukoji Rao Holkar. The present head of the family is his son, who served Government as tahsildār for some time, but resigned his post in 1893.

¹ He died in the autumn of 1907, and the succession is disputed.

CHAPTER IV.

AGRICULTURE.

SOILS.

102. The prevailing soil of the valley is the black alluvial loam commonly known as "black-cotton."

General nature
and distribution of
soils.

This fine soil is highly argillaceous and remarkable for its great porosity and consequent retentiveness of moisture. It is practically never irrigated; yet even in seasons of short rainfall it produces fair crops. From its absorbent quality it quickly expands and contracts under the influence of moisture and dryness; and in the hot weather it is cracked and fissured in every direction to considerable depths, so that it naturally becomes thoroughly aerated, and deep-soil ploughing is, as a rule, unnecessary. The soil varies in colour from black to light brown. The best is usually found in level stretches, either at the top or bottom of the lie of the country, while the intermediate space on the slope is not so good, because the finer particles are washed out and the moisture drained away. The lie of the surface is, therefore, of almost as much importance as the actual composition of the soil. This soil is almost everywhere of great depth. Along the foot of the hills, where complaints have been made of its shallowness, it has been found to be from 3 to 5 feet deep, while in the valley the average depth is about 20 feet. It is extraordinarily fertile, containing nearly all the necessary elements of productiveness and for generations past it has borne successive crops of wheat without irrigation or manure, and with scarcely any rotation. Such is the soil of the Hoshangābād valley. In the hilly tracts it is sandy, and generally unsuited to the cultivation of spring crops. There are, however, degrees of fertility in the valley proper, varying according to the levelness of the plain and the

number of streams that intersect it. The poorest parts are the eastern and western extremities of the District. The Sohāgpur tahsil contains comparatively little first-class black soil. Around Pachlaorā and Sobhāpur, indeed, is some of the richest land in the District; but generally the country is light and undulating, and cut up by many jungle-girt streams, which bring down a sandstone detritus from the Mahādeo hills. In the Hoshangābād tahsil there is a considerable proportion of sandy soil east of the Tawā, but the Raisalpur plain is second to none in fertility. The valley is crossed by a few streams, but none of them have much deteriorating effect, until the belt of jungle which flanks the Andan is reached. Taken as a unit, however, the Seoni tahsil is the most fortunate. The black soil valley is of good quality and stretches right up to the foot of the hills, which lie well to the south. Beyond the Ganjāl, the eastern portion of the Hardā tahsil is little, if at all, inferior; but in the Chārwa tract to the west the soil is again light and intersected by stony ranges.

103. In the valley the same field may be sown with wheat

Exhaustion of
the soil.

for 30 or 40 years in succession, without irrigation, manure, rotation or fallow. It has frequently been remarked that this is

probably the only soil in the world which could bear such a strain, and it seems evident that with this method of cultivation even Hoshangābād black soil cannot be immune from exhaustion. Mr. (Sir C.) Elliott carefully considered the question at the time of the thirty years' settlement; and as his conclusions seem to be entirely justified by the subsequent history of the District, they are worth quoting in full:¹ ‘The local word ‘for a field being exhausted is *rasid*, and in old reports and re- ‘turns this is a phrase of constant recurrence. There are great ‘numbers of villages against which in the second and third five- ‘years-settlement books the remark is written—“Soil good, but “quite exhausted.” “Soil thoroughly worn out.” Yet these ‘same villages and these identical fields have gone on being

¹ Settlement Report, Chapter III, para. 59.

'cultivated from that day to this, with only such fallows as
 'could be allowed by breaking up uncultivated land in place of
 'the field thrown out of cultivation—a resource which has been
 'diminishing every day. In 1830 Major Ousely wrote of the
 'Sobhāpur *tīluka* as producing only one-third of what the
 'Bābai *tīluka* did : but if this was accurate, a very strange
 'evolution must have taken place ; either Sobhāpur must
 'have increased in productiveness, though cultivated without
 'intermission, since it now produces as much as, or very little
 'less than, Bābai ; or else Bābai must have fallen to a third of
 'its former produce, which view appears untenable. Considering
 'these things, it would hardly be unreasonable to deny the
 '*rasid* theory altogether ; and this for some time I was inclined
 'to do. I believe, however, that there must be some truth in it,
 'though the form in which it is expressed is much exaggerated
 'and requires modification. It stands to reason that land, even
 'the black soil of the Nerbudda valley, must deteriorate if it is
 'cropped year after year without anything being returned to it.
 'There can be no doubt that when this soil is newly broken up
 '(after the first year) the produce is for two or three years
 'greater than it is afterwards. In the Tāpti valley at present
 'the wheat stands breast-high in some of the new villages, and
 'the ear is very large and full, and the crop nearly double the
 'average of the Nerbudda valley : and, no doubt, when the
 'Nerbudda valley was first broken up, the crops were the
 'same, and as long as half the first-class land was unculti-
 'vated, and a new field could be broken up for every one thrown
 'into fallow, they are not likely to have deteriorated much.
 'But this was an exceptional time, and when once regular
 'cultivation set in, and the majority of the land came under
 'the plough, a certain amount of deterioration followed. The
 'old rate of produce in the golden age of fifty years ago is
 'supposed to have been tenfold, and, judging from the Tāpti
 'valley, which is in the same condition now, I do not conceive
 'it can have been more than twelvefold. I reckon the average
 'now to be sixfold, and my belief is that it fell very rapidly

'from twelvefold to about eight, and then rather slowly to six or seven; that it was at that stage when the land was reported " very much exhausted " in 1830, and that it has fallen very slightly, if at all, since then. I have formed this opinion from what I have seen of the Tāpti villages, which are so modern that their history can be known with certainty, and also from enquiries into the produce of fields newly taken up from fallow, which for a year or two produce a little more than their neighbours, and then fall to the general level. Lighter soils get exhausted sooner; sandy and gravelly fields will often bear only four or five years cropping with *kharif*; second-class *rabi* fields will last longer, but must be thrown up at last; but the true black soil, if properly cultivated, will, I think, go on producing at the rate of sixfold for ever, and will not fall below it.'

104. The classification of soils at the thirty years' settle-

Soil classification
at the 30 years' settle-
ment.

ment had the merit of simplicity, while defining clearly the broad distinctions that prevail. The Settlement Officer discarded the native nomenclature of the patwaris'

papers, considering that the record of crops grown on the land was sufficient for all practical purposes, since the relation between the crops and the soil was invariable. 'To say that a field grows wheat or kutki,' he wrote, 'is as clear an indication of its value as to write it down *mār* or *sihār*.'¹ In his opinion, there were really only three classes of soil,—black, sandy, and the combination of the two. For assessment purposes, however, he found it more convenient to make four classes, giving two to the combination,² 'one being that in which the black predominates, the other that in which sand and gravel predominate; the one undulating, the other steep; the one growing principally *rabi* and an occasional *kharif* crop, the other principally *kharif* and an occasional *rabi* crop.' The value assigned to these four classes was R. 1.8 per acre

¹ Settlement Report, Chapter IV, para. 11.

² Settlement Report, Chapter V, para. 14.

for the first, R. 1-4 for the second, R. 1 for the third and R. 0-8-0 for the fourth. In other words their relative values were estimated proportionally as 6, 5, 4 and 2.

105. A more elaborate system of classification was adopted at the settlement of 1891-96, based upon

¹ Soil classification
at the settlement of
1891-96.

three principles:—(1) the physical qualities or geological formation of the soil, known as the soil class; (2) the capacity of the

soil to grow different crops, known as the crop class; (3) the lie of the surface of the field and a few other special characteristics, such as whether the field receives the village drainage, whether the crop is damaged by wild animals and so on, known as the position class. These are the differences ordinarily recognised by the cultivators of the District, and the vernacular terminology used by them was adopted.

106. The soil classes adopted for the District were ten in number:—(1) *mariār*, (2) *kābar* I,

Soil classes.

(3) *morand*, (4) *kābar* II, (5) *rānkar*, (6) *sihār*, (7) *pilotī*, (8) *khairī*, (9) *barrā* and (10) *kachhār*.

Mariār and *kābar* I are both rich black soils of first-rate productiveness composed of very fine particles with little or no sand or grit. *Mariār* is more friable than *kābar*, breaking up into soft powdery clods. *Kābar* is more tenacious, and when dry forms into hard clods, which break with a smooth fracture. *Mariār* is the regular first-class black soil of the valley. There is but little of it in the Sohāgpur tahsil, but fine stretches of it are found in the remaining three tahsils. It is seen to perfection in the plains around Raisalpur, Seoni and Timarni. The soil is friable and easily worked, producing fine crops of wheat, to which it is almost exclusively devoted. *Kābar* I is generally found in somewhat low-lying stretches of land, and the only continuous areas are found at Chaurāhet in the

¹ Settlement Report, para. 73 and following.

Hoshangābād tahsil and around Pachlaorā in the Sohāgpur tahsil. It requires deep and frequent ploughing. The soil is very heavy and good rains are required to admit of its preparation, but when the season is favourable it produces a better crop than *mariār*.

Morand is an inferior quality of *mariār*, not so dark in colour, and generally containing small limestone pebbles. It is the commonest soil, covering 45 per cent. of the cultivated area of the District. It occurs in continuous stretches throughout the valley. The level fields are almost exclusively devoted to the cultivation of wheat, but where the surface is uneven, it is more usual to sow the mixture wheat-gram or some other spring crop.

Kābar II is similarly a poorer variety of *kābar I*, lighter in colour and containing a larger proportion of sand and grit. It is only found in isolated patches along the valley, being most common in the Hoshangābād and Hardā tahsils. It is usually devoted to wheat, but is famous for the heavy leguminous crops which it produces, more particularly *tiurā* (*lākh*), peas, *masūr* and gram. In some parts of the Sohāgpur and Hoshangābād tahsils it is largely mixed with sand, and is then hardly fitted for wheat.

Rānkar is an inferior kind of *morand*, from which the best ingredients have been washed away by the action of water. Hence it is found, as a rule, on sloping ground, is of a lighter colour than *morand*, and contains a large proportion of pebbles. It is widely distributed throughout the District. The better quality is usually sown with a mixture of wheat and gram, because the yield of wheat alone is small. The poorer qualities are sown with gram alone or with autumn crops, especially *til*.

Sihār varies entirely from the black soil varieties, being of sandstone formation. It is of light colour, containing a large proportion of sand. The admixture of black cotton and sandy soils is not unknown, but no separate class was formed for it.

It is locally known as *domattā*, and in any subsequent classification should, in Mr. Sly's opinion, be recognised. In his settlement, such soil was classed as *sihār*, although it is considerably more valuable than the sandy variety, being able to bear fair crops of wheat. The relative value was consequently brought out in the crop class rather than in the soil class. This sandy soil is very prevalent in the Sohāgpur tahsil and in the eastern portion of the Hoshangābād tahsil, but it almost entirely disappears further down the valley. It grows wheat, but the true *sihār* is almost exclusively devoted to autumn and garden crops. Its fertility depends upon the amount of clay mixed with it ; when this proportion is large, good crops of rice, *juār* and *tur* are raised, but when the sand predominates the usual crops are *kodon* and *kutkī*.

Pilotā is a yellow argillaceous soil, very hard when dug ; it may produce gram under favourable conditions, but never bears wheat.

Khairī is a red soil of stiff consistency, containing many small nodules like a loose conglomerate of small depth, and capable of producing only the minor autumn crops. These hard soils, with but little depth, are generally found on the top and slopes of bare hillocks, and are not usually cultivated. The better qualities bear a crop of *til*, but are more usually sown with the minor millets, with intervening fallows after three years of cropping.

Barrā is a very poor soil, generally reddish in colour, and containing a large quantity of stones and pebbles ; it is usually found on the sides of hills, not generally more than one foot deep, and is capable of producing only the minor millets. It will not, as a rule, bear cropping for more than three years in succession, and then requires a rest for three years. It is just on the margin of cultivation, and it is only in years of good rainfall that it yields much profit.

Kachhār is an alluvial deposit of great fertility, being composed of the finer particles of black soil brought down by the rivers and deposited on a low-lying patch along the bank.

The only important stretch of it is found in the old bed of the Nerbudda river in the Hoshangābād tahsīl. This grows the finest wheat crops in the District.

The following table shows the area occupied by each class of soil at the time of the settlement of 1891-96:—

Soil.	Area.	Percentage of total cultivated area.
Mariār	110,262	10.4
Kābar I	8,329	0.8
Morand	479,618	45.05
Kābar II	57,859	5.4
Rānkār	275,803	25.9
Sīnār	117,622	11.05
Pilotā	1,030	0.1
Khairi	7,316	0.7
Barrā	3,457	0.3
Kachhār	3,251	0.3
Total cultivated area ...	1,064,547	100.00

107. Three crop classes were recognised:—(1) Wheat Crop and position land (*gohāri*) ; (2) Garden land (*bāri*) ; classes. and (3) Minor crop land (*mutafarikāt*).

No less than 79 per cent. of the cultivated area was found capable of producing wheat. A different position classification was adopted for each of these crop classes. For wheat land the following positions were differentiated:—*thil*, a low-lying field in a hollow retaining moisture for a considerable time; *dhongar*, a high-lying field on a slope, uneven and cut up by ravines, unable to retain its fair share of moisture; *jhola-wāla*, a field slightly uneven, with the surface damaged by small water-channels; *ujārwāla*, a field situated in or near jungle, which is damaged by wild animals and requires extra watching; *bandhia*, a field embanked with an embankment; *abpāshi*, a field irrigated; *geunrā*, a field lying near the village site, and manured by its drainage or in other ways; *māmūli* (ordinary), a field which is not included in any of the above classes. The bulk of the wheat land consists of ordinary level fields situated in the plain.

Of the other distinctions *thāl*, *bandhia*, *abpāshi* and *geunrā* were classed as advantages, and the remainder as disadvantages. In order, however, that the construction of embankments might not be discouraged, no additional rate was placed on *bandhia*. Garden land and minor crop land were subdivided into ordinary, *abpāshi*, *geunrā* and *ujarwāla*.

108. According to the system of settlement now prescribed for the Central Provinces, each Soil-factors. kind of soil is given a certain value.

Soil-factors.

Soil-factors. — kind of soil is given a relative numerical factor of value, which is called the soil-factor. At the last settlement a standard scale was framed on the basis of *morand* being valued at 32 units. This number was arbitrarily fixed to facilitate statistical work ; for, as the average rent of *morand* was about Rs. 2 an acre, the unit incidence approximated to one anna. The following table shows the variations for class, crop and position, which were usually adopted :—

Soil class.	Wheat land.							Garden land.			Minor crop land.						
	Ordinary.	Embanked.	Thal.	Irrigated.	Dhongar.	Jholawala.	Ujarwala.	Geunri.	Ordinary.	Irrigated.	Ujarwala.	Geunri.	Ordinary.	Irrigated.	Ujarwala.	Geunri.	
Kachhär ..	40	40	40	40	40	40	40	Per cent.			Per cent.	"	"	"	"	"	
Kabar I ..	38	38	40	47	36	37						"	"	"	"	"	
Mariär ..	36	36	38	45	32	34		-25	+25	32	48	-25	+25	"	"	"	
Kabar II ..	34	34	37	42	26	29								17	+25	-25	
Morand ..	32	32	36	40	24	27								16	+25	+25	
Rankar ..	24	24	32	36	20	21		-33	+60					10			
Sihär ..	24	24	32	36	20	21								8			
Pilotä ..	"	"	"	"	"	"				20	36	-50	+50	6	+50	-50	+50
Khairi ..	"	"	"	"	"	"								5			
Barrä ..	"	"	"	"	"	"								8			

STATISTICS OF CULTIVATION.¹

109. Of the total area of the District 946 square miles

Proportion of area
occupied.

or 26 per cent. are included in Government forest, 186 square miles or 5 per cent. are classed as not available for

cultivation, and 669 square miles or 18 per cent. as culturable waste other than fallow. The remainder amounting to 1845 square miles or rather more than $11\frac{3}{4}$ lakhs of acres is occupied for cultivation. The occupied area is thus 51 per cent. of the whole District and 68 per cent. of the village area. This may seem a small proportion; but in the southern portion of the District the unoccupied area includes large hill tracts, which are often covered with dense forest. In the valley proper it seldom exceeds one-fifth, and in the best parts is not more than one-tenth. Some of the valley groups, however, also show a considerable proportion unoccupied. This generally occurs in the riverine groups where the total area includes half the Nerbudda river, and there is also some unculturable ravine land. Little distinction can be made between the various tahsils: each has its proportion alike of the valley, the hills and the river. Nearly half the unoccupied area is shown as tree forest, rather more than one-quarter as scrub jungle and grass, and the remainder as under water, hill and rock, etc. Tree forest includes most of the hilly tract in the south, which is always covered with forest growth of some sort, and often contains valuable timber. The land under water in the Nerbudda and its many tributaries accounts for the large area shown in the third category. The occupied area rose from $10\frac{1}{2}$ lakhs of acres at the thirty years' settlement to nearly $12\frac{1}{2}$ lakhs at the settlement of 1891-96, an increase of 18 per cent.; famine and loss of population have now reduced it again to just over $11\frac{3}{4}$ lakhs, a

¹ The Agricultural statistics are for the year 1905-06. The area of the District here given is that obtained from Agricultural Returns and is less by 80 square miles than the area according to professional survey.

decrease of 5 per cent.¹ It would thus appear that there is room for the extension of cultivation at any rate up to the limit of the area occupied at last settlement. But extension beyond that limit seems unlikely. Despite the fact that 18 per cent. of the whole district is classified as 'culturable waste,' a very large proportion of this is quite unfit for agriculture. At the time of the settlement of 1891-96 the pressure of population and high prices had already been sufficient to bring most of the good soil under the plough, and some of the poorer soil then cropped was only just within the margin of cultivation. Thus, when this limit is once again reached, the future of agriculture would seem to be an increase of cultivation within the occupied area rather than its further extension.

110. Old records of fallows and cultivation are very in-

Fallows and cultivation. accurate. At the twenty years' settlement the *amīn* who made the measurements is

supposed merely to have climbed up a tree and estimated all the land he could see. The thirty years' settlement record is also unreliable. According to the figures given by Mr. Sly,² there were then 240,000 acres of old³ fallow, amounting to 23 per cent. of the occupied area, while the cultivated area was 813,000 acres. The great extent of the old fallow is due to the fact that large areas of waste were often recorded at the instance of the mālguzār in his own holding, although not really occupied by him, with the double object of restricting the grazing to his own cattle and of preventing the acquisition of tenant right by cultivators. The Settlement Officer also allowed occupancy-right in one acre of old fallow for pasture to every three under the plough. At the settlement of 1891-96 the area recorded as old

¹ Throughout these statistics no account has been taken of the transfer of territory in 1896 and 1904. The area transferred was, however, almost entirely forest, and the effect on Agricultural statistics is practically negligible.

² Settlement Report, para. 32.

³ i.e., land within the occupied area which has been fallow for 3 years or more.

fallow had contracted to 181,000 acres, or $14\frac{1}{2}$ per cent. of the occupied area, and the cultivated area had correspondingly increased to 1,065,000 acres, an expansion of 251,000 acres or 31 per cent. The proportion of old fallow was thus still considerable; and though the valley generally was closely cultivated, in Hardā, where it is the custom for cultivators to maintain private grazing grounds, large stretches even of good black soil were kept fallow. Thus, while in the Raisalpur plain old fallow was only 4 per cent. of the occupied area, it was 12 and 17 per cent. in the Timarnī and Pokharnī groups, where the black soil is almost, if not quite, as good and continuous. Since the settlement of 1891-96 the old fallow has gradually increased every year, as the lands abandoned during the famines, which cannot be shown as old fallow until after the lapse of three years, have been properly classified. The area now so recorded is 228,000 acres or 19 per cent. of the occupied area, giving an increase of 46,000 acres or 25 per cent. since the settlement. It is thus evident that there is now room for a very substantial increase in cropping within the occupied area. At the same time the cultivated area has contracted to 954,000 acres, that is, by 111,000 acres, or 10 per cent. The proportion of new fallow proper to the District is not large, varying from 8 per cent. of the total area in sandy soils, where occasional rest is necessary, to less than 1 per cent. in the best black soil of the valley, which seems able to grow continuous crops almost indefinitely. The area under new fallow increased from 38,000 acres, or $3\frac{1}{2}$ per cent. of the occupied area, at the thirty years' settlement, to 67,000 acres, or 5 per cent. of the occupied area, at the settlement of 1891-96, indicating, probably, the expansion of cultivation to inferior soils. During the famines, new fallow of course rapidly increased, reaching its highest figure in 1896-97, when it stood at 172,000 acres. Since 1901-02 it has gradually diminished to its proper limits, partly through increase of cropping, and partly by lapsing into old fallow. It now covers 69,000 acres or 6 per cent. of the present occupied area.

111. At the thirty years' settlement the net cropped area, according to Mr. Sly,¹ was 775,000 acres Progress of cropping. and at the settlement of 1891-96 it was 997,000, giving an increase of 222,000 or nearly 29 per cent. The famines, of course, at once reduced cropping, the lowest limit reached being 813,000 acres in 1899-1900. Immediately after the famine of 1900 there was a partial recovery and in 1902-03 the net cropped area was 884,000 acres. Since then, however, there has been little progress, and even now crops cover less than 885,000 acres. This is a decrease of nearly 113,000 acres, or 11 per cent. since the settlement of 1891-96, and until the population of the District has recovered its former proportions, there seems little prospect of any further increase.

112. The double-cropped area is always small, and, Double crops. being dependent on the later monsoon rainfall, varies considerably from year to year. In the thirty years' settlement returns it is shown as blank, and at the settlement of 1891-96 it was less than 9,000 acres. The highest recorded figure is 13,000 acres in 1902-03, when nearly 6 inches of rain fell in October and November, while it sank to 5,000 acres in 1899-1900, when the October and November rainfall was *nil*.

113. Wheat is the most important crop in this District, Statistics of crops. and the cultivation of the spring or *rabi* harvest, here called *unhāri*, is almost synonymous with agriculture. Autumn or *kharif* crops are generally despised. As its local name, *sihāri*, implies, autumn cultivation is *primā facie* evidence of an inferior soil, while the area under wheat and its mixtures is a fair guide to the richness of any particular tract. Similarly, an increase in *kharif* cultivation generally indicates scarcity and distress; for while the autumn harvest gives a small but quick return, wheat cultivation involves a heavy and more

¹ Settlement Report, para. 82.

hazardous outlay but eventually a handsome profit. The prosperity of the District in any year can thus be determined by the extent to which spring crops, and especially wheat, are grown; and in this light the statistics of crops should be examined. In the following statistics *maghai* til and *tūr*, which in a normal year together cover about 70,000 acres, are classed as autumn crops. At the thirty years' settlement, then, the area under autumn crops was 174,000 acres or 24 per cent. of the total cropped area, and that under spring crops 565,000 acres or 76 per cent. As cultivation expanded, approximately the same proportion was maintained, the figures for 1892-93, when the cropped area was the largest ever recorded, being autumn crops, 282,000 acres, or 26 per cent.; spring crops, 790,000 acres or 74 per cent. The ensuing years witnessed the constant contraction of the area under spring crops, and the corresponding expansion of the area under autumn crops. The worst year was 1897-98, when spring crops only covered 465,000 acres, or 53 per cent., while 406,000 acres or 47 per cent. were devoted to autumn cultivation. The recovery dates from 1901-02, when the proportion was 70 per cent. of spring crops and 30 per cent. of autumn over a gross cropped area of 840,000 acres. Since then, with the exception of a temporary relapse in 1902-03 when, chiefly owing to bad weather prospects and also to shortage of plough-cattle, autumn cultivation increased its area by nearly 100,000 acres, this proportion has remained practically unaltered. In 1905-06 the actual figures were:—*kharif*, 278,000 acres or 31 per cent.; *rabi*, 613,000 acres, or 69 per cent. The statistics for individual crops are very similar. Wheat, of course, is the most important, and the proportion of *rabi* to the total cropped area rises and falls according to the expansion and contraction of the area under wheat. Again, any decrease in wheat cultivation has always been accompanied by a corresponding increase in *juār*, which in times of scarcity has temporarily

¹ These figures are taken from Mr. Elliott's Settlement Report.

risen to the dignity of a staple grain. The following table will show in outline the history of these two crops :—

YEAR.	WHEAT.		JUAR.	
	Acres.	Percentage of gross cropped area.	Acres.	Percentage of gross cropped area.
At 30 years' Settlement.	468,000	62	42,000	5½
Settlement of 1891-96.	617,000	61	35,000	3
1897-1898.	242,000	28	171,000	20
1901-1902.	371,000	44	67,000	8
1902-1903.	274,000	30½	111,000	12
1905-1906.	441,000	49½	36,000	4

Of other crops, gram shows considerable and somewhat arbitrary variations, though, like juār, it tends to increase in inverse ratio to wheat. Thus the largest area ever devoted to gram was the 155,000 acres of 1894-95, when the area under wheat was 140,000 acres less than in the preceding year. Gram then occupied 15 per cent. of the gross cropped area. Similarly, during the bad years that followed, the area under gram was nearly always well over 100,000 acres. At the thirty years' settlement, gram covered 83,000 acres, or 11 per cent. of the gross cropped area, and in 1905-06, 84,000 acres, or 9 per cent.; and that is about the area ordinarily devoted to this crop. Kodon and kutki, the food staples of the hilly tracts, have been a very constant crop, usually occupying between 60,000 and 70,000 acres, or about 7 per cent. of the cropped area. Cotton has been more variable. At the thirty years' settlement 25,000 acres, or 3 per cent. of the cropped area, were recorded as under cotton. Under the influence of the cotton boom this increased to about 50,000 acres in 1864, and thereafter it varied most arbitrarily, sinking, for instance, from 45,000 to 15,000 acres between 1891-92 and 1893-94. During

the years of scarcity cotton cultivation languished, occupying less than 6000 acres in 1895-96. But latterly its cropping has shown a constant improvement. In 1901-02 the cotton area was 20,000 acres, or 2 per cent. of the cropped area, and this has steadily increased, until in 1905-06 it was 57,000 acres, or 6 per cent. of the cropped area, which is the highest figure yet reached. Another crop which seems fairly to have established its popularity of late years, is til. Occupying only 18,000 acres, or 2 per cent. of the cropped area, at the thirty years' settlement, it had markedly improved its position at last settlement, when it covered some 63,000 acres, or 6 per cent. of the cropped area. During the famines the inexpensiveness of its cultivation caused it to be largely grown, and between 1894-95 and 1899-1900 the area under til averaged about 100,000 acres. Subsequently it has somewhat declined, though over 150,000 acres were planted with til in the great *kharif* year of 1902-03. But now it seems to have settled down to a steady area of some 75,000 acres, or 8 per cent. of the cropped area. On the other hand, the area under linseed has contracted to a remarkable degree. An insignificant crop at the time of the thirty years' settlement, it subsequently developed, until in 1893-94 it covered 34,000 acres or 3 per cent. of the cropped area. After holding its own satisfactorily through the famine period, it has since become unpopular because of its uncertainty and now occupies only about 10,000 acres or 1 per cent. of the cropped area. Rice has also declined. Prior to last settlement it covered about 20,000 acres and improved its position slightly during the famines, when it was a useful food. But its area has since diminished to less than 10,000 acres. Tiurā, or lākh, and tūr were also grown to a considerable extent as food stuffs during the famines, but the normal acreage of each of them is now about 14,000 acres, or 1½ per cent. of the cropped area.

CROPS.

114. The Nerbudda valley is essentially a corn-growing area, and wheat (*Triticum sativum*) Spring crops. Wheat. has always been the staple crop of the District. Mr. Elliott refers to the "waving illimitable mass of wheat," while a reference to the statistics of cropping given in paragraph 113 will illustrate its prominence in more recent times. Wheat growing has, indeed, always been the speciality of the Hoshangābād cultivator; and so long ago as 1864 a sample of *jalālia* taken from the village of Raisalpur obtained the first prize at the Lucknow Exhibition, as the "largest and finest" wheat exhibited among a great number of competitors. Several varieties are locally distinguished, and are described in the following note, which Mr. G. Evans, of the Central Provinces Agricultural Department, has kindly furnished :—

The following varieties are grown to a greater or lesser extent in the Hoshangābād District: *jalālia*, *kathia*, *safed pissī*, *lāl pissī*, *bansi*, *bangasia*, *mundī pissī*, and *daodia* or *soharia*. All except *mundī pissī* are bearded, the reason for this preference being that beardless wheat is supposed to be attacked more freely by birds. These varieties may be classified thus: *Triticum sativum durum*, 'hard' or 'macaroni' wheat, includes *jalālia* and *bangasia*; *Triticum sativum turgidum*, 'rivet' wheat, includes possibly *kathia*, *soharia* and *bansi*, but these Indian rivets are very hard to classify, as they resemble the 'macaroni' wheats in many ways; *Triticum sativum vulgare*, 'common' wheat, includes *safed*, *lāl* and *mundī pissī*. *Jalālia* is a very fine wheat, which consists of two varieties, one possessing white-chaffed, and the other red-chaffed ears. The ordinary field crop consists of a mixture of these two varieties, with a preponderance of the red-chaffed type. The grain of both types is the same, and is large, hard and yellow, with a certain percentage of semi-soft grains. It is in great request for home

consumption on account of its good flavour in the form of unleavened bread, and the cultivator generally reserves a portion of his best (*mariār*) land for this variety. It is more liable to the attacks of black rust than the other varieties. A field of *jalālia* is also more likely to be attacked by pig, partly on account of the flavour of the grain, but chiefly because, when ripe, this wheat sheds its grain very easily, when the stalks are shaken, whereas with *kathia* and *pissī* the grain is more firmly attached to the glumes. It is for these reasons that *jalālia* is gradually being supplanted by *kathia*, which is a hardier kind. *Kathia* also occurs in two varieties, a red and a white chaffed. The grain in both cases is the same, being large, thick, hard, tough and red, with many semi-soft grains. The straw is a peculiarly dull yellow in colour, and is tough. It is a hardy variety, being suited to many kinds of soils, and is less susceptible to rust than *jalālia*. For these reasons, as already stated, it is displacing *jalālia*, although it is said to make very poor flour, and fetches lower prices than that variety. It gives a better average outturn than *pissī*. *Safed*, or white, *pissī* is a white chaffed type with clean white straw, and a rather large plump-bellied grain, which is very soft and starchy. It is not liked by the cultivator, as it does not make good unleavened bread and is difficult to grind in the rains. In England, whither it is largely exported, it is used for mixing with the fine American varieties. A good average type is grown throughout the District, and Ralli Brothers consider that the Seoni-Mālwā *pissī* is the best quality to be found in the Central Provinces. The price of *pissī* varies according to the conditions of the export trade, but it usually sells cheaper than *jalālia*. *Lāl*, or red, *pissī* is occasionally grown, and is exactly similar in outward appearance to *safēd* *pissī*. The grain, however, is rather larger, and has a pale reddish coloured skin. It, too, is very soft and starchy, and is not eaten by the people, if they can get another variety. It is exported, but fetches a lower price

than white *pissī* on account of its colour. *Bansi* is not common, but may possibly become more popular. It is often confused with *bangasia*, an inferior variety which it somewhat resembles in outward appearance. Typically *bansi* is a tall strong wheat with a large square head, with long awns, which are blackish in colour. The chaff is covered with a short thick white felt. The grain of true *bansi* is much appreciated by the people, fetching a higher price even than *jalālia*. A sample was found to contain 90 per cent. of hard yellow grains. This variety is nearly immune from the attacks of black rust. One of the reasons why it is not more grown is that the heads are heavy and the straw is very brittle, so that the crop is often beaten flat and the heads knocked off by heavy rain or hail. The typical *bangasia* of the Central Provinces is, I think, a small headed, red-chaffed, black-awned wheat, with clean hard red grains. This type is occasionally grown in Hoshangābād, and I have received one or two samples of it labelled '*bansi*'. But the *bangasia* ordinarily grown in this District is a small headed white-chaffed black-awned wheat, with mixed hard and semi-hard yellow and red grains. Its glumes are also felted, which gives it a superficial resemblance to *bansi*. It is only grown on high-lying land, as its quality is very poor and the prices obtained for it are low. It is much more susceptible to rust than *bansi*, and it is largely owing to confusion with this variety that the true *bansi* is not more widely grown. *Mundi pissī* is not common, probably because its ears, being unprotected by awns, are attacked by birds. It is generally immune from rust, the reason being that the common black rust is late in its appearance, while *mundi pissī* is the earliest wheat, ripening 15 to 20 days before white *pissī*, and thus it often escapes infection. *Daodia* and *soharia* are bearded, white-chaffed wheats, which are occasionally grown on poor lands. The grain is small, thick, semi-hard, and white. The outturn and prices of these wheats are inferior. Only one sample of *soharia* was sent in from all the Hoshangābād circles, and

it closely resembled *daodia* in all respects.

It may be added that *pissī* is by far the most extensively grown. In fact, the unscientific cultivator usually divide all wheats into *pissī* and *gehun*. It is interesting to note that at the thirty years' settlement it was described as a very inferior kind, little sown, whereas at the settlement of 1891-96 it was found that no less than 80 per cent. of the wheat sown was *pissī*. The growth of the export trade, for which *pissī* is in the greatest demand, is responsible for this revolution. And when it is remembered that *pissī* is not ordinarily consumed locally and fetches a lower price than *jalālia*, the enormous extent of that trade can perhaps be estimated.

115. *Mariār*, *morand* and *kābar* are the recognised

Method of cultivation.

wheat-growing soils. On such land a crop will be raised year after year without irrigation, manure, rotation, or even

a fallow. In poorer soils, such as *rānkar*, or in fields which show signs of exhaustion, a mixture of wheat and gram known as *birrā* is usually sown. The proportion of gram varies in accordance with the quality of the soil, a small quantity being added in the better fields, and a large quantity in the poor fields. The general average is about two-thirds wheat and one-third gram, but in years of short rainfall the proportion of gram is increased. Linseed and *tiurā* are also occasionally mixed with wheat. To prepare for sowing, a field is worked three or four times with the *bakhar*, or surface plough, between June and October, whenever the rains permit. In July, if the soil is not too wet, it has of late years become not uncommon to plough with the *hal* instead of the *bakhar*. The *hal* turns over the soil to a depth of nine to twelve inches, so that it must lay open more of its fertilising agents. The season for sowing is Kārtik (October-November); but the day selected depends partly on the temperature, and still more on the *muhūrat* or auspicious day. For the former a common test is to dip a little cotton wool in *ghī* and place it out in the field; if the *ghī* solidifies in the night, the weather is cold enough. The

muhūrat is calculated by the village *parsai* or priest for a small remuneration. The calculation is based on a few simple dogmas, set forth in doggerel verse, respecting the virtues of certain sidereal days, lunar mansions, and days of the week. Tuesday and Saturday are always days of malign influence. This science applies only to the day on which sowing is begun; once fairly started, the sower may laugh at all the astrology of the *Shāstras*. When commenced, it should be pressed on, and finished if possible in thirteen days. It is believed that the produce of the seed sown in the thirteen days is much greater than that of the later sowings. No doubt, the longer the sowing is delayed, the drier and less productive the ground becomes. The amount of seed sown varies from 110 lbs. to the acre in Sohāgpur to 80 lbs. in Hardā. Among cultivators the accepted explanation for this difference is that in the poorer soil of the east, the seed does not germinate so well, and probably the plants do not "tiller" so much. But inferior cultivation is, no doubt also partly responsible. Sowing completed, the cultivator has ordinarily nothing to do but watch his crops, drive off wild animals, and wait for the harvest. The standard outturn of the District is given as 620 lbs. to the acre, but it is certainly less in the east than in the west. Formerly it was put at 740 lbs., but in 1894 Mr. (now Sir Bamfylde) Fuller, after an examination of the statistics, reduced it to its present figure. It seems not unlikely that even this estimate is too high. The general opinion among cultivators is that the average crop is four to five times the seed sown in the east of the District, and five to six times in the west, but such estimates usually make some deduction for expenses.

116. The principal disease from which the wheat of this District suffers is rust, known as *geruā*, and much damage is caused by it in low-lying fields, when the cold weather rain is excessive and accompanied by cloudy weather.¹ By far the commonest variety is the black rust (*Puccinia graminis*), which

¹ A note on the varieties of rust was kindly supplied by Mr. G. Evans

covers the leaves, stems, and in bad cases even the ears, with red spots, which later on change to black, as the spores formed change in character. The orange rust (*Puccinia triticini*) is also prevalent in parts of the District, especially along the banks of the Nerbudda. It appears on the upper surface of the leaves in the form of small orange spots arranged in lines. The yellow rust (*Puccinia glumarum*) is seldom found. Rust is a fungoid disease, and is most prevalent in damp, cloudy weather, when both the wheat plants and the land in which they are growing are saturated with moisture ; even heavy rain will do no harm, if it is followed by bright sunshine. The most serious attacks of rust occurred in 1831-32 and 1877-78, when the loss was very large indeed. It does not necessarily destroy the whole produce of the plant, but invariably deteriorates it, so that the grain is shrivelled, and in a bad attack practically does not form at all. If the shrivelling is not excessive, the grain can be used for both food and seed ; and it is an ascertained fact that a crop grown from rust-shrivelled seed is no more liable to rust than any other, nor are the plants at all stunted in their growth. As already stated, *jalālia* suffers most from rust, *kathia* and *pissī* being less susceptible, while *bansi*, and to a less extent *soharia*, have a great reputation as rust-resisting varieties. Another disease which is fairly common is *kāri* or smut. The variety of this disease prevailing in the Nerbudda valley is probably *Ustilago tritici* ; but as only isolated plants are usually attacked, it is not of great importance. Also a fungoid disease, it originates in infected seed-grain ; but up to the final stage growth is not affected, and to outward appearance the plants are healthy, except that they are often a darker green in colour and unnaturally vigorous at the start. Ultimately the disease appears in the ear, which is covered with a dark brown or black dust composed of very minute globular spheres. These are the only two diseases found. Blight or mildew would appear to be unknown ; and what is sometimes described in reports as

blight is really rust. Among other scourges the most important is hail, which causes much damage, especially if the crop is in ear. Storms about harvest-time are not uncommon, but fortunately they are very local. Withering, or *umaljāna*, often follows a period of drought. The stool is surrounded by dead stalks and leaves, which it has thrown out, but has not been able to keep alive. In very dry seasons, too, white-ants sometimes attack the roots of the young plants, which then wither up and bear no grain. Of weeds the only one that deserves notice is *kāns* (*Saccharum spontaneum*). Formerly this noxious grass was rare; but careless agriculture in the famine years, and especially the substitution of autumn crops, sown broadcast and hand-weeded, for the carefully cultivated wheat, so encouraged its growth that its eradication has often become a serious problem. Finally, in an enumeration of the wheat-grower's enemies, wild animals must not be omitted. In the jungly tracts the trouble and difficulty of protecting spring crops against pig, *nīlgai* and *sāmbhar* is the greatest obstacle to the extension of spring cultivation. In the plains the ravages of pig and buck are a serious and inevitable loss. *Rakhwāli*, or watching, is a perpetual strain on the cultivator by day and night, while the animals' fearlessness makes vigilance of little avail.

117. Next in importance to wheat comes gram or *chanā*

(*Cicer arietinum*). It is commonly grown

Gram.

as a mixture with wheat, but fields of

pure gram are frequently met with, and it is also occasionally mixed with linseed. Whether pure or in mixtures, it is grown on soil that is considered unsuited, either by the poorness of its quality or by exhaustion, for wheat alone. When short rainfall or the prevalence of *kāns* produces a bad tilth, it is often substituted for wheat. Very occasionally it is sown as a second crop on land from which an autumn harvest has already been reaped. Three varieties of gram can be distinguished, one red, another yellow, and the third white. In

Hoshangābād the red and yellow varieties are not sown separately, but are almost universally mixed. The white-grained gram is a smaller species, locally known as *parhatia*. It is not often found, and is grown on poor land. The grain is said to be very sweet, and is eaten parched. The land receives the same preparation for gram as for wheat, but the seed is sown a little earlier, because the high-lying fields usually devoted to it dry up more quickly. The amount of seed sown to the acre is ordinarily 60 lbs. The standard outturn for the District, formerly given as 700 lbs., was reduced in 1894 to 550 lbs., which experiments have proved to be a more reasonable figure. But the outturn varies very much from soil to soil; when it is grown as a rotation crop on good wheat land, the yield is heavy, but on stony high-lying land it is small. Gram is little liable to disease, and produces a fair crop even in years of deficient rain. Frost damages it greatly when it is in flower, a cold night in the jungle villages often doing much harm. The gram caterpillar (*Chloridea obsoleta*), locally known as *illi*, is the chief pest to be guarded against, and the only remedy at all likely to succeed is to watch for its first appearance on the plant, pick it off by hand, and destroy it. Wild animals are especially partial to gram, so that it requires constant watching. When young, the top shoots are often picked off and used as a vegetable; this does no harm, but often strengthens the plants, inducing a branching habit of growth.

118. Linseed or *alsī* (*Linum usitatissimum*) has declin-

Linseed, tiurā and masūr. ed in popularity owing to the uncertainty of its crop. Showers of rain at the flower-

ing time do much damage, and it is partic-
ularly liable to rust. The linseed rust (*Melampsora lini*) is of quite a different genus to the rusts which attack wheat, though in the teleutospore stage it closely resembles black rust (*Puccinia graminis*) in outward appearance. Soils also get "linseed-sick"; that is, a field will refuse to grow a crop of linseed until a period of eight or more years has elapsed.

No satisfactory explanation of this so-called sickness has yet been suggested. Linseed flourishes in the same kind of soil as wheat. Large fields of it, however, are now seldom seen; and it is usually sown in odd corners, often as a border adjoining a pathway, because animals will not eat it. The conditions favourable to the crop and the method of cultivation are practically the same as for wheat, with which it is occasionally mixed. The amount of seed required is about 25 lbs. to the acre, and the outturn varies largely; in a good year it may be as high as 500 lbs. to the acre, but owing to its uncertainty, the standard figure is given as only 250 lbs. Tiurā or lakh (*Lathyrus sativus*) is properly speaking a cattle food, and before the recent famines the contraction of the grazing area had tended to increase its cultivation. During the famines it was used as food by the poorer classes, but was found to cause "lathyrism," an incurable form of paralysis; and it now covers less than half its former area. It is cultivated like other spring crops, and is sometimes sown with gram. A small part of the crop is usually cut as a green fodder, but the greater part is allowed to ripen, and the pulse is given to the cattle during the rains. About 60 lbs. of seed are sown to the acre, producing an average outturn of 550 lbs. Masūr or lentils (*Ervum lens*) is grown for food. It is usually sown in wheat land, which is prepared for it in the same way as for wheat. Both tiurā and masūr are liable to the attacks of a caterpillar, which is probably identical with the gram caterpillar (*Chloridea obsoleta*).

119. Autumn cultivation has always been of secondary

importance in this District. In the hill tracts, indeed, the people depend on this crop for their food; but in the valley,

except in its eastern portion, they are usually grown in odd patches of ground, which cannot conveniently be used for spring cultivation. During the famine period, the sowing of the cheap autumn crops, especially juār, increased rapidly at the expense of the more costly, but more valuable, wheat;

*Autumn crops.
Kodon and kutki*

but as the District recovered its normal condition, the area devoted to *kharif* once more contracted. Til and cotton alone hold their own, and appear to be steadily adding to their popularity. The cultivation of autumn crops in the eastern tahsils is usually very rough. All kinds of weeds grow apace, and the prevailing system of broadcast sowing necessitates hand-weeding, which is generally neglected. But in the Hardā tahsil and the western half of the Seoni tahsil it is customary to sow in lines with a dril and weed with a hoe plough. This difference in the methods of cultivation is said to mark the limits of the western and eastern lines of colonization. Among autumn food grains the most important are kodon (*Paspalum scrobiculatum*) and kutki (*Panicum miliare*), small millets, which form the staple diet of the aborigines of the jungle villages. The soil is generally roughly prepared by one ploughing only. Two crops are sown at distinct seasons, one in the dry soil just before the commencement of the rains, and the other in July. With good rain they grow rapidly, and are generally ready to be cut about two months after they are sown. The native proverb well describes their cultivation: *tin pākh do pāni, ai kutak de rāni*,—‘with two falls of rain in three fortnights the kutki crop is ready.’ The seed is always sown broadcast at the rate of about 15 lbs. to the acre, and owing to the smallness of the seeds it is not uncommon to mix them with powdered earth in order to sow them more evenly. The standard outturn for kodon is 350 lbs. per acre.

120. Til (*Sesamum indicum*) has increased in importance during the last few years. Good prices

Til.

have stimulated its cultivation, and it is especially recognised as the poor man’s crop. Though til is numbered amongst the autumn crops, there are two distinct harvests, *kharif* and *rabi*, and the latter is by far the most important. The cultivation of autumn til is practically confined to jungle villages. It is generally grown as a subordinate crop on poor soils, which are roughly pre-

pared by a single ploughing. Sown in July, it is reaped in November. There are two varieties of seed, white and black, of which the former is the more common. Spring til, generally called *maghai*, is grown all over the valley. Two kinds of seed are recognised, one red and the other brownish black; but the latter, though common higher up the Nerbudda valley, is seldom met with in Hoshangābād. It is sown in August or September, and reaped in February. The spring til is considered the least troublesome and most inexpensive crop that can be grown. The amount of seed required is less than 1 lb. to the acre; and the preparation of the land with the *bakhar*, which precedes sowing, makes weeding unnecessary. It flourishes even in a year of light rainfall. Animals, too, seldom touch it, and the depredations of birds have alone to be averted. Til is, however, peculiarly susceptible to frost, and a single cold night may destroy a whole crop at almost any stage of its growth. The standard outturn is 250 lbs. to the acre. There is very little difference in the percentage of oil produced from the various kinds of seed, though the red variety is probably the best.

121. The area under cotton has also markedly increased of late years. Most of the cotton of

Cotton

the District is produced in the Hardā

tahsil, but it is now a recognised crop everywhere. The variety grown in Hoshangābād is *Gossypium neglectum*, containing a mixture of several sub-varieties. The lint is very coarse and short; and the comparatively long-stapled *banī* is probably not to be found, preference being given to the harder *jari*. It is sown in Asārh (June-July) like most other autumn crops, and is commonly mixed with tūr. Cotton cultivation is as yet imperfectly understood. Except in Hardā, it is usually sown broadcast, and weeding is neglected. Moreover, as cotton requires less rain than other autumn crops, the annual fall of this District is generally too heavy, and the standard outturn is thus small, being put at only 200 lbs. of uncleaned

cotton to the acre, which gives about 60 lbs. of lint. It suffers but little from frosts, which usually do not come until after the bulk of the crop has been gathered. The pests which attack the cotton plant are frequently unrecognised by the cultivators, and are not distinguished in the vernacular. The most important are the cotton stem-borer (*Sphenoptera gossypii*), the spotted boll worm (*Earias fabia*), the red cotton bug (*Dysdercus singulatus*) and the cotton aphid (*Aphis gossypii*).

122. Juār (*Andropogon sorghum*) is ordinarily a crop of minor importance, though in the famine Juār tūr, and rice years its acreage more than quadrupled. A number of varieties are locally distinguished, of which the most important are *amnerī*, *garia*, and *sātpāni*. Of these *amnerī* can be identified by its compact drooping head, while the head of *garia* is looser and more erect; *sātpāni* is a dwarf variety. *Motūra* is grown to some extent from seed provided by the Agricultural Department. Its head being too loose and spreading for birds to sit on, it is less liable to their attacks. Many other kinds, no doubt, are also grown; but the number of varieties of this plant is so large, and their economical value so imperfectly understood, that the cultivators themselves overlook many distinctions, and class several different kinds together under one general head, such as "safed (white) juār." The method of cultivation is generally slovenly. The land is prepared at the end of the hot weather with a plough or *bakhar* according to the nature of the soil; and except in the west, where a drill is employed, the seed is sown broadcast. Juār is seldom manured, though it responds readily to such treatment; but it is frequently grown as a mixture with tūr. Birds are very destructive to this crop, and it is attractive to pig. Sometimes it is attacked by the sugarcane-borer insect or *ronthī* (*Chilo simplex*). Occasionally also it is infected with a species of rust (*Puccinia sorghi Schwein*), which appears in the form of red spots and lines on the

leaves and stems, but does not seem to have such disastrous effects as the wheat rusts. Sometimes, too, juār suffers from smut. These diseases are likely to appear when the weather is excessively cloudy and wet. About 8 lbs. of seed are sown to the acre, and the crop, which is gathered in December, yields a standard outturn of 450 lbs. The value of the stalks as cattle food (*karbī*) is not fully recognised, and they are often left to rot in the fields. Tūr, arhar or rāhar (*Cajanus indicus*) is counted as an autumn crop; but the period of its growth extends over eight months, and though it is sown with the autumn crops, it is reaped at the spring harvest. It is an exceptionally good crop for a mixture, fertilising the soil with nitrogen taken from the atmosphere by the bacteria in its root nodules, and with the leaves that fall from it. Cotton is almost invariably mixed with it, and juār very frequently. The amount of seed required is about 32 lbs. to the acre, and the standard outturn is 400 lbs. The Hoshangābād variety contains mixed red and white grains. The large variety known as Bilāspur tūr has been tried, but as it requires irrigation, it is never likely to be much grown in this District. The early Nāgpur variety, which ripens before it is likely to be attacked by frost, should become popular. Tūr has a strong growth, and after the principal crop has been reaped, the plants branch out to such an extent that they completely shade the ground. It has great root development, resisting drought to a remarkable degree. On the other hand, it is very liable to damage from frost and damp, and from caterpillars. Four of these pests are distinguished; the tūr-pod caterpillar, the larva of the plume-moth (*Exelasta parasitica*), which bores into the pod and eats the seed from the outside, not actually entering the pod itself; the tūr-pod fly (*Muscida acalyptata*), one of which lives in each seed; the tūr-leaf caterpillar (*Encelia critica*), which feeds on the young leaves, webbing them together with silk; and finally the gram caterpillar (*Chloridea obsoleta*), which also frequently attacks this crop.

A field of tūr affords excellent cover for wild pig, which are often to be found lying up in it, especially when it contains patches of the ber or wild plum. The area under rice (*Oryza sativa*) is small, and is dwindling every year. It is chiefly grown in the *sihār* soil of the Sohāgpur tahsil, and in the *bārās*, or gardens, of jungle villages. It is sown broadcast in plots prepared for the purpose at the beginning of the rains, and receives little attention beyond a couple of weedings. Transplanting and manuring are rare; embanking and irrigating are almost unknown. The varieties grown are consequently coarse and early. The amount of seed sown is usually about 72 lbs. to the acre, yielding a standard outturn of 700 lbs. of unhusked or 420 lbs. of husked rice. The chief pests are the rice grasshopper (*Hieroglyphus furcifer*), which eats the young leaves, and the six-spotted tiger beetle (*Cicindela sexpunctata*).

123. The autumn pulses, urad (*Phaseolus radiatus*) and

mūng (*Phaseolus mungo*), are little grown.

Miscellaneous crops. Maize or *makkā* (*Zea Mays*) covers about 3,000 acres. The area under peas varies considerably from year to year. In 1893-94 it was more than 4,000 acres; in 1905-06 it was less than a thousand. Sugarcane (*Saccharum officinarum*) was never a crop of much importance, covering only 1,400 acres at the time of the thirty years' settlement; and since the opening of the railway, the local *gur*, or unrefined sugar, has been undersold by that imported from Northern India, and its cultivation has diminished almost to vanishing point. Tobacco (*Nicotiana tabacum*) planting has also declined; and is now practically limited to garden cultivation. San-hemp (*Crotalaria juncea*) covers about 1,500 acres; it is grown in small patches, and is recommended by the Agricultural Department as a green soil manure and an eradicator of *kāns*. Among minor crops, the most important cereals and pulses are *sawān* (*Panicum frumentaceum*) and *rāla* (*Setaria italica*). The principal condiments and spices are *dhanā* (*Coriander sativum*), and *mīrchā* or chillies (*Capsicum*).

frutescens), which are grown to a considerable extent by the Māli cultivators on the banks of the Tawā. Mango and guava are the important fruits. Oranges and lemons are seldom seen, but plantains are extensively cultivated at Sohāgpur, Seoni and Timarnī. *Pān* or betel (*Piper betel*) is usually grown with plantains, and the betel of Sohāgpur and Seoni is well known and exported in considerable quantities. The crop is sown in March, and picking begins in July and goes on until February. Garden crops include brinjals (*Solanum Melangena*), *bhendi* (*Hibiscus esculentus*) and sweet potatoes (*Ipomoea Batatas*). Melons and cucumbers are grown in the sandy soils of the river-beds. The cultivation of English vegetables and flowers in school gardens and on estates in the Court of Wards has familiarised this form of horticulture throughout the District, and several mālguzārs now have good gardens. The Government garden at Pachmarī produces first-class English vegetables in the summer months.

124. The agricultural implements in ordinary use have

**Agricultural imple-
ments.** changed little since the days of the thirty years' settlement. The common plough

or *hal* is an ordinary wooden plough with an iron share, which varies in weight from about 45 lbs. in the east of the District to 80 lbs. in the west. The heavier ploughs of Hardā, it may be remarked, certainly produce better crops, but whether it is due to differences of cultivation or of soil is doubtful. The iron share, called *phār* or *kusia*, projects about half an inch beyond the wooden boot, called *parchī* or *chao*, to which it is attached, and weighs about 1 lb. in the lighter plough and 6 lbs. in the heavier. To press the share into the ground, the cross-beam of the yoke is loaded with a weight, called *ghangrā*, which is made light or heavy according to the depth of furrow required. The drill plough, or *nāri*, is contrived in a very simple way; a hole is made in the wooden boot of the *hal* and into this a bamboo tube is fixed, with a broad wooden cup at the top, which is fed

by a boy or a woman who follows the plough. Often the hole at the bottom gets clogged with earth, and for a few yards, till the boy finds the tube getting full of seed, the furrow is unfed. The *bakhar* is a hoe or paring-plough. The iron share, or *pāns* is 6 lbs. to 8 lbs. in weight, about 4 inches deep, and from 18 to 21 inches wide. It is fixed, not like the plough share in the line of the furrow, but at right angles to it and fastened to prongs attached to a heavy horizontal beam. By altering the angle it can be made either to scrape over the surface of the ground, just paring the weeds and stubble, when the ground is hard, or, when it is softened, to penetrate it to its full depth, working it most effectually. It is a little heavier than the plough. In the west, where autumn crops are sown in lines, the drill used is the *bakhar* with a bamboo tube attached. The *kolpā*, or weeding plough, is used for hoeing up the weeds in drill-sown autumn crops. It passes between the furrows without injuring the crop, but it cannot be used when the seed is sown broadcast. It is of the same shape and make as the *bakhar*, but much smaller; the share weighs only $1\frac{1}{2}$ lbs. or 2 lbs. It is interesting to note that a *kolpā* sent up from this District to the Lucknow Exhibition of 1864 gained the first prize as a "light grubber, or hoe-plough." These are the important implements of agriculture; but for his other operations the cultivator is also equipped with tools of recognised shape and name. The *parenā* is the goad, pointed at one end for the benefit of the oxen, and fitted with a flat piece of iron at the other to scrape the mud from the plough. The sowing basket is called *dhūli*. For fencing he has a spud, called *ob* or *darān*, and a straight fork, called *dūlia* or *jāri*. The reaping sickle is known as *darānti*. The implements of threshing are the crooked fork, called *ankrī* or *kurail*, and the wooden rake or *pachangā*; for winnowing the basket (*toplī*), the three-legged stool (*tipai*), and the broom (*baharī*) are used. In addition a few simple and inexpensive English implements have been introduced at the Powārkherā

Government farm. They are exhibited at important fairs, and their value is canvassed and appreciated amongst the more advanced agriculturists. The only one, however, which is recognised as an indubitable gain is the winnowing machine, which appears likely to come into general use. These machines are made locally at the Friends' Mission workshops at Rasūlia and also at Khāparkherā. Among ploughs the Swedish and Turnwrest varieties have been tried, but it is doubtful whether the extra labour which they involve is ordinarily compensated by any appreciable advantage. The Turnwrest plough, however, has given excellent results in the eradication of *kāns*. It has also proved useful for sugarcane cultivation. English threshing machines are of little utility because treading out by cattle is still necessary to break the straw into *bhusā*, the staple cattle food. Similarly fodder cutters for juār stalks, or *karbi*, which have had a large sale in Berār, are unsuited to a District where juār stalks are not regularly eaten by cattle.

125. In the main agriculture of the District manuring is unknown. In the valley the droppings

Manure.

of the cattle are used during the open season for fuel. Even during the rains many cultivators do not conserve the manure, but throw it into the nearest hollow to be washed away. In some cases droppings in the cattle-sheds are collected, but they are not pitted, so that there is a great loss of many valuable constituents from exposure to sun and rain. No attempt is made to conserve the liquid manure. The amount of manure actually collected is not large. It is usually spread in the hot season over a few fields which are intended for autumn crops, generally rice, if there is any, and sometimes a patch of juār or sugarcane. The fields for spring crops are practically never manured. The only cultivators regularly using manure are Kāchhis and Kirs, who grow vegetables, tobacco, melons and the like, and sometimes an irrigated patch of wheat. In

the jungle villages, where firewood is plentiful, and which are not near any large village with a market for cowdung fuel, the droppings of the cattle over the grazing grounds are not collected at all, but as much as can be obtained from the cattle sheds is used for manuring autumn crops. There is much need for improvement in the methods of storing and using manure. It is especially necessary to extend the practice of manuring from autumn crops to the all-important wheat, and to discover what artificial manures best supplement the natural. Considerable attention is given to this point at the Government farm at Powār-kherā, where recent experiments have established amongst other things the value of green soiling with *san* or hemp. Other crops too are, no doubt, capable of improvement by the use of chemical manures. Saltpetre, for instance, is recognised as a beneficial dressing for cotton. The great value of manure to the black soil of Hoshangābād, especially as a preventive of exhaustion, can be estimated from an interesting experiment made by Mr. Elliott so long ago as the time of the thirty years' settlement. 'The village of Kulāmri, near Hoshangābād,' he wrote, 'was recorded as one of the most exhausted villages in the District thirty years ago. I enquired for and took the most exhausted field in the village, and manured and cultivated it two years running. The first year (1864) I raised a crop of four maunds of gram and one and a half of barley. The gram was a good crop, eight-fold the seed; but the barley was a failure and wanted water. The second year (1865), which was not on the whole a favourable season, the crop was eight maunds of wheat, or eightfold; there was only one field in the village equal to it, and that had been taken up from fallow the year before.'

126. There is no recognised system of rotation of crops. *Rabi* and *kharif* lands are for the most part separated by a clearly defined mark, so that the simple system of

alternating spring with autumn crops is generally impossible. In good soils wheat is grown year after year without any change. If, however, a field shows signs of exhaustion, a leguminous crop, which may be wheat-gram or gram or tiurā, will be substituted for one or more years. Though ignorant of the scientific reason, the cultivators know that a leguminous crop improves the yield of wheat which follows it next year, and that a mixture of wheat-gram will thrive in a field where wheat alone will be poor. Similarly, tūr is regularly mixed with cotton and juār, and in drill-sown fields the lines of tūr are supposed to be moved from year to year so as to include fresh soil. Kodon and kutkī are often mixed with juār and tūr; and the custom of growing small patches of various autumn crops in the same field ensures a certain amount of promiscuous rotation. In some parts, however, on the better *sihār* soil, it seems customary to grow wheat-gram, tūr-kodon and rice in a triennial rotation, but the cultivators will hardly acknowledge this as a recognised practice. Generally speaking, mixed crops take the place of rotation. Double-cropping is very rare, and is practically confined to fields which are manured by propinquity to the village site. Gram usually follows rice or some other autumn crop. Some cultivators have experimented in good black soil with *sawān* as a catch-crop before wheat, but without much success.

IRRIGATION.

127. The area irrigated is almost negligible, amounting to only 2,300 acres in 1905-06. There is

Irrigation. only one tank from which irrigation is attempted, and most of the 1,200 wells in the District are used primarily to supply drinking-water. Irrigated wheat is seldom seen, and irrigation is generally confined to vegetables and garden crops, raised by Kāchhis, and a few patches of sugarcane. ¹ But they are considered as a kind of fancy

¹ Settlement Report of 1865, Chapter III, para. 58.

'agriculture, and the true cultivator, the *kisān*, looks on them with contempt, as little peddling matters, and what stirs his ambition is a fine large wheat field, 80 or 100 acres 'in extent, as flat as a billiard board, and as black as a Gond.' The neglect of irrigation in the cultivation of wheat has frequently puzzled Settlement and other officers, especially those who have been accustomed to the agriculture of Upper India. But further consideration has shown that the local prejudice is not altogether unreasonable. In the first place, the retentiveness of moisture, which is characteristic of the black soil, allows a fair spring harvest to be reaped in normal years without any need for irrigation ; and as the average holding in this District is at present large, the cultivator is satisfied with a moderate outturn and does not aspire to higher and more intensive forms of agriculture. Secondly, the opportunities for irrigation are small. The Moran river scheme, which was considered at the time of the thirty years' settlement, was rejected as impracticable. And with the exception of a strip of country along the Tawā river, water is usually found at a depth of not less than 30 and often 60 feet below the surface during the cold weather, which means a big lift. Artificial tanks are few and far between, and except at the foot of the hills, the configuration of the ground is unsuitable for their construction. Thus in most wheat areas irrigation is only possible from wells, the cost of which, owing to the depth of the spring level, is generally out of proportion to their value. Then, again, irrigation without manure, though not altogether useless, undoubtedly loses much of its value. For it stands to reason that, as irrigation is only a way of getting more out of the land, if nothing is returned, the land must sooner become exhausted ; therefore, if irrigation becomes the practice, manuring must become the practice also. Now it must be remembered that in the wheat-growing land of the valley cowdung is the most important fuel, and that its conservation as manure is practically unknown. And further, even supposing that another kind of fuel was sub-

stituted, and all cowdung carefully collected and conserved for the fields, the amount available would probably still be inadequate for the cultivation of irrigated spring crops. The total number of cattle in the District, including bulls, bullocks, cows and buffaloes, averaged during the decade ending 1905-06 some 240,000 head. Mr. Elliott, discussing the same question, estimated that four animals would manure one acre. This is a liberal allowance, and experiments made on the Nāgpur Farm in 1906-07 show that with proper conservation the manure of four animals would be enough for a much larger area. Such experiments, however, are not altogether convincing: for there is a wide difference between the big stall-fed bullock of an experimental farm and the miscellaneous units of a village herd. Still, there is no doubt that if the people saw a direct and immediate advantage in the conservation of manure, as they do in the cotton Districts, a supply would be obtained sufficient for a very considerable fraction of the cultivated area. There is, however, another consideration. Local prejudice is strongly against submerging good land for the construction of irrigation tanks; for it is the persistent opinion of cultivators that irrigated wheat is much more liable to rust in years when the cold weather rainfall is substantial, and that in a District where the cold weather rain seldom fails, irrigation may be a positive disadvantage. This view is certainly exaggerated, and it can hardly be doubted that in a series of years a field that is irrigated would give a much better outturn than one that is not. On the poorer soils this is apparent; excellent irrigated wheat crops, for instance, are grown by the Kāchhis of the Dudhī valley, where the soil is of inferior quality. But in justification of the local prejudice against irrigation, it is a fact that experiments with several varieties of wheat at the Powārkherā farm have proved that irrigated wheat in black soils is more liable to be badly attacked by rust than the dry crop. There are, however, considerable stretches of poor soil, especially in the Sohāgpur tahsil, where irrigation

would be most beneficial. Schemes to supply this need by the construction of storage tanks commanding these areas, are now under consideration.

128. The embanking of fields is not at all common in this District. In view of the great advantage that accrues from embankments on the black soil higher up the valley in the Districts of Nar-singhpur and Jubbulpore, this neglect may also seem remarkable. Such embankments as there are, are usually not more than 2 or 3 feet high, and are practically confined to light soil areas, where they are constructed chiefly for the improvement of autumn crops. In good wheat land these embankments are scarcely ever seen, partly because the cultivation of a catch crop of rice before wheat is not customary in the agriculture of this District, and partly because the extra saturation which they cause is believed to encourage the growth of the deep-rooted weed *kāns*. Embankments of the large type have been constructed experimentally on good wheat soil with the primary object of eradicating *kāns* by the total submersion of the field, which destroys the roots by cutting them off from the air. These constructions have not, however, been altogether successful, and it seems probable that the great depth of the black soil enables the water to sink too rapidly to permit a sufficiently long submersion. It is not likely that the embankment of wheat land will ever take a permanent place in the agriculture of the District. For the risk of rust from excessive saturation seems greater than any advantage that may accrue. In a District where the cold weather rain is generally considerable, some control over irrigation seems essential. Hence applied irrigation from wells or tanks, when waterings can be regulated, is probably preferable to embankments. Irrigation officers, however, believe that the system of embanking wheat can be successfully introduced, and the question will, no doubt, be finally decided by adequate and prolonged experiment.

There is also much room for improvement in the construction of small banks across the water-ways of the fields to prevent them being scoured by surface drainage, which carries off the fine particles of the soil and cuts up the surface.

CATTLE.

129. The bullock is practically the only animal used for agricultural purposes. Every village has

Cattle.

its herd of cows, which are kept almost

entirely for breeding, while numbers of better class animals are imported by the wealthier agriculturists. Four bullocks form the proper complement of a plough : one pair is yoked from morning to 9 A.M., and the other pair from 9 to noon ; then the ploughman has his food, and after 1 P.M., ploughing recommences, each pair having a spell of work. The area served by such a plough varies somewhat according to the needs of the cultivator, the nature of the crop, and the size and strength of the animals employed, but is usually from 20 to 25 acres in the east of the District, and rather more in Hardā, where the cattle are exceptionally good. In 1892-93, before the famines, there were 185,000 plough cattle, while the total cropped area was 1,063,000 acres, giving an average of nearly 23 acres for every plough. The losses of the famines were very severe, but, being made good by charitable grants and loans, did not seriously diminish the number of plough cattle in the District. The worst years were immediately after the famines, when the people were too poor to replace their normal losses from casualties and wastage, but received no special relief. In 1902-03 there were only 93,000 plough cattle for a cropped area of 884,000 acres, the average thus being 38 acres to the plough. Recent years have witnessed an improvement, but in 1905-06 there were still only 122,000 cattle for a cropped area of 885,000, so that the average was 29 acres to a plough. The effect of this has been that it has become customary amongst the poorer

cultivators to employ only one pair of bullocks, without change, for a day's ploughing, working them from morning to mid-day and from 3 P.M. till evening, to the deterioration of agriculture and the exhaustion of the cattle. The result of this system is reflected in the shortening of the bullock's working life, to which the contraction of the grazing area has also contributed. A bullock is ordinarily put to work in its fourth year, and at the time of the thirty years' settlement its working life was estimated at 10 to 12 years. At the settlement of 1891-96 the area classed as old fallow had diminished by 25 per cent., and Mr. Sly's enquiries showed that the average working life of a bullock might be put at 8 years. Old fallow has since increased, and in 1906-07 stood at almost the same figure as in 1865, but overwork has outweighed the advantages of improved grazing grounds. It may be added that cultivating castes castrate their own cattle, generally at the age of 3 or 4, in a primitive and cruel manner. At the time of the thirty years' settlement there was a superstition against castration. But it now seems to have disappeared. Nose-strings are used for both plough and cart cattle everywhere except in a few parts of the Sohāgpur tahsil. There is a common method of training cattle to the plough which is somewhat peculiar and deserves notice. It is customary for the cultivators of the plains to lend their young stock to the men of the jungle villages to be broken in. By this method many jungle cultivators get their land ploughed without any outlay in cattle, although, of course, the standard of their agriculture suffers from the employment of untrained animals.

130. The cattle bred in this District are generally small and of an inferior kind. The stock has probably degenerated since the time of the thirty years' settlement, partly from in and in breeding and partly owing to the contraction of the grazing area. Mr. Elliott noted that the old superstition against castration was useful to prevent breeding in and in; for several

large castes always sold their young bulls to less scrupulous dealers, and bought oxen in return. But since the disappearance of this prejudice the infusion of new blood is rare. An attempt, which is meeting with some success, is now being made to improve the local stock by lending to mālguzārs, on certain conditions, good bulls from the Mālwī herd on the Government farm at Powārkherā. Most cultivators keep two or three cows, breed their own calves, and have no occasion to buy. Imported animals are, however, frequently purchased by the more well-to-do. The cattle most prized are of the Mālwī or, as it is sometimes called, the Mālwā breed, the home of which is in the Central India States. Large, heavy, but somewhat sluggish, the Mālwī bullocks are the best workers for deep black soil, and are purchased in large numbers at the cattle fairs held at Sankhā, Rājgarh and Narsingarh in Central India. The best type of Central India cattle is, however, the Sankhā, which comes from the fine grazing grounds of the Kāla-Sindh tract. Good cattle of a lighter build are also imported from Chhindwāra and Nimār. The Nimāri or Singāji bullock is small and active, a fair trotter, and better suited for the cart than for the plough. Such cattle are much used by the Hardā cultivators, who purchase them at Singāji fair in Nimār. It is a frequent complaint that the price of bullocks has risen excessively since the thirty years' settlement, but the increase does not seem to be out of proportion to the general rise in prices. The cultivator is apt to compare the former price of the bullock bred in the District with the present price of the best imported animal. At the time of the thirty years' settlement, the price of a pair of bullocks was stated by the Settlement Officer to be Rs. 60 to Rs. 100; but this apparently refers only to imported animals, and the average price of locally bred bullocks was probably not more than Rs. 32 a pair. Nowadays a pair of local bullocks fit for agriculture will fetch from Rs. 50 to Rs. 60, while the ordinary price of

imported cattle ranges from Rs. 60 to Rs. 100 a pair, according to their breed and quality. A pair of good trotting bullocks from Sankhā or Singāji may sell for as much as Rs. 250.

131. The first essential for cattle is a sufficiency of grazing land. Mr. Elliott calculated that each plough of cattle required 8 acres pasturage, and accordingly gave occupancy rights in 1 acre of fallow for every 3 of arable. Private grazing grounds are still maintained by many tenants in Hardā ; but in the rest of the District, though the mālguzār usually keeps a patch of good soil under grass for his cattle, the tenants use the common grazing grounds of the village. The Hardā system has several advantages : the plough cattle are better fed, fewer useless animals are kept, and with the pasture close to the cultivated field, ploughings are more frequent ; but, on the other hand, it unnecessarily narrows the cultivated area. For cattle not immediately required for use, Government forest supplements the village grazing ground. The rate of the grazing license varies, according as the owner is a dealer, cultivator or tenant of a Government village ; nomadic licenses are also issued to travelling dealers. Cows and calves rely almost entirely on grazing for their food ; but plough bullocks receive in addition mown grass, chaff or *bhusā*, with a little linseed oilcake and *tiurā*. The stalks of *juār*, known as *karbī*, are not generally used as cattle fodder in this District. Salt is now freely given : a plough bullock gets two chittacks (4 oz.) every week, and a cow from one to two chittacks according to its size ; a bull kept for breeding purposes is given two chittacks every fortnight. Poor cultivators give the same quantities, but at longer intervals. The feed of a plough bullock varies with the seasons. Roughly speaking, for about three and a half months, from April to the middle of July, they are stall fed on *bhusā* ; for three and a half months, to the end of October, they live on the grass they find ; for three

months, to the end of January, that resource has to be supplemented by a gradually increasing quantity of mown grass or hay; and during February and March they live on the green tiurā, the wheat stubble and the threshing floor.

132. The buffalo is primarily the milch animal of the

Buffaloes. District. Male buffaloes are, however,

occasionally used for ploughing in the

sandy soils of Sohāgpur and as draught animals in carts.

Kāchhis and Kirs also sometimes employ them in garden

cultivation, for carrying manure and for raising irrigation

water from a well. Milch buffaloes are highly valued, and

their possession is always a sign of prosperity. Large culti-

vators of four or five ploughs in Hardā and Seoni often

have as many as eight or ten. They calve in July and

August, and remain in milk for six months, while those that

do not calve again in the following season give milk for a

whole year. Buffaloes are very well fed, and as long as

they are in milk, their owner will grudge them nothing.

A seer of *binolā* (cotton seed) and a seer of oilcake or *alsī* are

commonly given them as a daily ration; and in the cold

weather the cultivator regularly cuts a large basket of *ber*

or wild plum leaves for his buffalo. Salt is also given, except

during the period of pregnancy, at the rate of two chittacks

(4 oz.) a fortnight. A she-buffalo, giving 5 seers of milk a

day, will fetch as much as Rs. '50. The average number

of she-buffaloes in the District during the ten years from

1895-96 to 1905-06 was 34,000, which is about one to every

three houses.

133. Sheep are not numerous, the total averaging 8,300

Other stock. for the ten years from 1895-96 to

1905-06. But goats are commonly kept

by the lower castes, principally for food. She-goats also

give good milk. The average number in the District during

the same period was 36,000. Ponies are few and of an

inferior kind. The majority belong to mālguzārs, who use

them for riding into market. Pony tongās can also be

Hired in Hoshangābād and Hardā. A pony generally costs from Rs. 15 to Rs. 20. Locally bred horses are seldom seen, but a few are imported from Bhopāl and Bombay. A considerable number of better class ponies and horses are maintained by the tongā agencies on the Pipariā-Pachmarhī and Itārsi-Betūl dāk lines. Donkeys and mules are also uncommon. The average number of horses and ponies in the District for the decade ending 1905-06 was 4,000, and of donkeys and mules 2,100.

134. Rinderpest, or *māta*, is not common. Foot-and-mouth disease, locally known as *khurī*, *Cattle diseases.* *roktī* or *baikara*, frequently attacks cattle

in the hot weather. It is a contagious fever accompanied by vesicular eruption in the mouth, chiefly on the tongue, and on the feet, at the junction of the skin with the hoofs and also between the hoofs. The local remedy is to tie up the animal near water with its feet in mud, while *dikāmāli* is rubbed in the interdigital spaces of the ulcerated foot. Hindus believe that fish pounded up with flour and given to the animal to eat is a cure for this disease. Gloss anthrax or *chhad* attacks the tongue and the interior of the mouth and throat. The blood vessels of the tongue are congested, and it becomes much swollen, especially at the base, and of a dark colour, as the veins are distended with black blood. Another throat disease, known as *ghat sarap* or malignant sore-throat, which was formerly believed to be a form of anthrax, is now identified as haemorrhagic siphcoëmia. It is not so rapid in its action as *chhad*. The local remedy for both these diseases is to brand with a hot iron on the neck. Pleuro-pneumonia or *piprī* is an affection of the lungs and the lining membrane of the chest. The period of incubation varies from ten days to two months. It is contagious, and tedious to cure. The prescribed treatment is one pice weight of *ajwain* and one of black pepper, mixed with a chittack (2 oz.) of *ghī*, to be administered twice a day, while both sides are branded with a hot iron. Natives also speak of a disease

tilli, which appears to be an internal form of anthrax. The spleen increases in size and is distended by a dark tarry blood. The remedy is a drench consisting of one tolā of tobacco, one of *tiklādi*, one of *kusum* and one of turmeric mixed in a seer of toddy and given every fourth hour. There are now three veterinary dispensaries in the District, at Hoshangābad, Hardā and Pachmarhī, and the theory and practice of scientific treatment of diseases is becoming more generally understood.

135. The most important cattle market is the weekly bazar at Itārsi. There are also good **Cattle markets, etc** weekly markets at Bābai, Rahatgaon and Sobhāpur. Mālwi cattle from Bhopāl can be purchased at Sāndia on the Nerbudda, which lies on one of the important trade routes from Central India. Cattle are also brought for sale to the weekly markets at Bankherī, Semri-Harchand, and Shohpur. There is an annual show at Bāndarābhān fair, when prizes are given to the owners of the best cattle. Further details will be found in the articles on these places in the Appendix.

CHAPTER V.

LOANS, PRICES, WAGES, MANUFACTURES, TRADE AND COMMUNICATIONS.

LOANS.

136. Except during the famine years, very few loans have been made under the Land Improvement Loans Act. The system of agriculture pursued in the Nerbudda plain does not give much scope for the ordinary methods of improvement. Field embankments and irrigation are generally considered to be of doubtful utility, while the configuration of the ground makes the construction of village tanks difficult. The first loan under the Act was granted in 1892-93. Out of a total of Rs. 31,000 advanced between then and 1905-06, more than Rs. 24,000 were distributed during the famine relief operations of 1897 and 1901. The bulk of this was spent on the construction of drinking wells and field embankments, and the eradication of *kīns*. The total amount advanced under the Agriculturists' Loans Act for the purchase of seed and plough cattle up to 1905-06 was Rs. 422,000. No loan was made until 1891, the prosperity which prevailed until then rendering Government aid unnecessary. In the years of scarcity which followed large advances were made under the Act, and from 1892-93 to 1901-02 the amount distributed annually averaged Rs. 37,000. Latterly, however, such loans have been few. For the three years 1903-04 to 1905-06 the amount annually distributed averaged only Rs. 5,000, and it is now rare for any but the aboriginal cultivators of the south to apply for *takāvi*, as a Government loan is usually called. The preference for the moneylender is partly due, no doubt, to the greater promptitude of transactions with a *Baniā* who is always present, and partly to the possibilities

of deferred repayment ; but it must also be remembered that a cultivator who requires a regular annual loan for his agriculture cannot depend on Government advances, which are uncertain and better suited to emergencies. Still more potent is the villager's rooted objection to the system of joint responsibility, which, though it affords a valuable test of the solvency and character of the borrower, is regarded, except in times of stress, as an impossible condition by the more sophisticated. It must be added that the field for agricultural loans has necessarily been somewhat contracted by the growing popularity of the co-operative credit societies established in the Sohāgpur and Hardā tahsils, which seem to the cultivator to possess all the advantages, without the disadvantages, of *takūri* advances.

137. Co-operative banking was started in this District Co-operative credit societies. in 1905 by Mr. C. E. Low, I.C.S., who founded in that year the six societies now existing. Of these the most important is the Hardā Urban Bank, a limited liability company, which alone is independent of Government assistance. Anyone residing within three miles of Hardā municipality may become a member. Its capital in 1907 was Rs. 10,400, subscribed entirely by share-holders, who then numbered 89. The rate of interest demanded is 9 $\frac{3}{4}$ per cent.¹ Of the profits, one-quarter is deposited in the reserve, which in 1907 amounted to Rs. 1,800, and the remainder after the deduction of working expenses is paid as a dividend to share-holders. Money may be lent to members for any approved object or to rural banks. A loan may be withdrawn, if used for any purpose other than that first stated by the borrower. The Society is primarily intended to finance small tradesmen and to furnish capital for establishing rural banks. The Hardā rural societies are two in number. Both have received Government loans, free of interest for three years, and afterwards at the rate of 4 per cent. per annum. Membership in the

¹ One and half annas per rupee per annum, or R. 0.12-6 per cent. per mensem.

Chārwa Gupteshwar Society is open to anyone residing within a radius of six miles of Parwan. In 1907 the number of its members was 162, and its capital Rs. 1900, of which Rs. 1000 were advanced by Government. Shares are Rs. 5 each. The rate of interest on loans to members is 9½ per cent. per annum. The Sodalpur Society, named after the Gūjar saint Kāna Bāba, in whose honour a large fair is annually celebrated here, admits only Gūjars residing within three miles of Sodalpur to its membership. As a close caste corporation, it alone of the Hoshangābād rural societies has inspired sufficient confidence in its members to encourage them to make deposits. The price of a share is Rs. 5. In 1907 the members of the Society numbered 60, and its capital was Rs. 1750, of which Rs. 550 were lent by Government and Rs. 250 by the Gūjar Panchāyat, while deposits amounted to Rs. 500 and Rs. 450 were subscribed by share-holders. Interest on loans is charged at the rate of 9½ per cent. per annum. In the Sohāgpur tahsil there are three rural societies, at Bankherī, Sobhāpur and Piparia. Persons holding land within a radius of three miles are admitted to the Sobhāpur and Piparia Societies, and within a radius of five miles to the Bankherī Society. The three banks are quite separate, but are conducted on similar lines. In 1907 the total number of members, the majority of whom were tenants of estates under Court of Wards management, was 139. The total capital was Rs. 4500, of which Rs. 1150 had been loaned by Government, free of interest for three years, and afterwards at 4 per cent., and Rs. 1080 by the Court of Wards at 3½ per cent. Shares are Rs. 10 each, and the rate of interest on loans is 9½ per cent. in the Bankherī society and 12 per cent. in the other two. These rural societies, though not perhaps conducted hitherto on strictly business principles, have well fulfilled their primary object of introducing, without undue official interference, the advantage of co-operative banking. The movement was initiated at a favourable moment, when famine and debt conciliation had

emphasised the disadvantages of the old system of credit and it now appears to have taken firm root in the District. Profits are somewhat reduced by the shortness of the period of loan ; for the principal is ordinarily repaid at harvest, so that for parts of the year a considerable amount of capital is likely to be unproductive. But, notwithstanding, the societies already established are flourishing, and pride of membership is strong. So far no difficulty has been experienced in enforcing repayments. Public disapprobation and loss of membership have proved sufficient sanctions, and there has been no need to have recourse to the courts. Nor has the movement been regarded with disfavour by the money-lending classes, who have rather shown an inclination to share in it. It is beginning to be recognised that low interest and prompt repayment are preferable to a higher rate and the delays and expenses of the law. And it is not anticipated that the moneylenders will hesitate, if required, to advance capital to agriculturists' societies through the medium of urban banks.

138. Rates of interest on private loans have risen of late years, and at the same time money-lenders have shown less inclination to advance and a greater anxiety to recover.

Interest on private loans. This is partly due to the losses of the famine years, which generally involved the borrowing class in insolvency either admitted or suspected ; but partly also to the operation of the Tenancy Act, which by diminishing the alienability of land depreciated its value as a security. For mortgages on agricultural lands the accepted rate is from 12 to 18 per cent., and even on land in large towns as much as 12 per cent. is often demanded. The rate of interest on ordinary cash loans is correspondingly high. For large sums on suitable security from 12 to 18 per cent. is charged. Small sums on a substantial pledge, such as a deposit of ornaments, are ordinarily advanced at 12 per cent., but a higher rate, sometimes as much as 24 per cent., is not

infrequently required. If the security offered is cattle, the rate is almost always 24 per cent. For small loans without security the usual rate is 24 per cent., but no limit is recognised. The rates for advances of seed-grain are even higher, being from 25 to 50 per cent. for *rabi* grains, and from 50 to 100 per cent. for *kharif*; and it must be remembered that the period for which the advance is lent is only from sowing-time to harvest. The Court of Wards in its dealings with its tenants has set an example to other mālguzārs, who are often the most extortionate lenders, by advancing grain at 12½ per cent. In the more solvent estates provision has also been made for money advances to tenants at 9½ per cent. per annum on the same principles as Government agricultural loans, including the joint responsibility of borrowers. It has been found, however, that, like Government *takāvi*, the disadvantages of which they share, such loans cannot compete with the Baniā, and actual transactions have hitherto been negligible.

139. Every moneylender of importance is a landlord, and many landlords are moneylenders.

Moneylenders.

The capitalists have invested largely in land, partly for its profits as a property, and partly for its advantages as a field for a money and grain lending business. Such speculators are usually Palliwāl Brāhmans, Mārwāris, and Mahesrī or Agarwāl Baniās. Successful Kalārs, or liquor-sellers, have also found loans on landed property a profitable investment for their savings. On the other hand, many mālguzārs of purely agricultural castes have taken to moneylending. Even the Rāj-Gonds of the hills are not untainted, and when the Fatehpur-Nadipurā estate was taken over by the Court of Wards, an extensive traffic in usury was revealed. Such a creditor is often a harder task master than the professional banker. His special knowledge and patriarchal position give him a hold over his tenants of which he is not slow to take advantage. His particular province is advancing seed-grain. This is an ancient and recognised duty of mālguzārs. In the days

before the thirty years' settlement it was even entered in agreements between tenant and landlord, and many were the complaints then brought by cultivators that their patels refused to lend. Properly conducted such a system can doubtless be an unmixed benefit. The Court of Wards, for instance, by distributing in this manner selected seed-grains has done something to improve the crops on its estates. But generally the patel's duty has become the patel's due, and seed-grain at a high rate of interest is forced upon the tenant. The most important moneylender in the District is Rājā Seth Gokuldās, the Mārwāri banker of Jubbulpore. He is especially strong in the Sohāgpur tāhsil, owning Sohāgpur itself, and many smaller moneylenders are indebted to him. The local firms are mostly established at Sobhāpur, the seat of a family of Rāj-Gond Rājās who have been among their most regular clients. Moneylenders with extensive businesses are also to be found at Khāparkherā, Bankherī, Umardhā and Piparia. In the Hoshangābād tāhsil, the principal shops are at Hoshangābād and Itārsi, while the cultivators of the Bordhā tract usually deal with the local Kalārs and Telis. In the Seoni tāhsil, which fell into the hands of the Baniās so long ago as the hard times of the quinquennial settlements, nearly every mālguzār is a money-lender, and there are also a number of shops of Mahesri Baniās at Guraria. In the Hardā tāhsil, too, many of the mālguzārs are moneylenders, living at Hardā or Timarnī, and managing their villages through agents.

140. In 1836 the Hon'ble Mr. F. J. Shore, who was then Commissioner of Jubbulpore, reported that in a recent tour through the District he had found the patels in

*Indebtedness.
Landlords.* a state of abject poverty, not a single one of them owning a horse. The benefits conferred by Major Ousely's twenty years' settlement can be judged from the fact that in 1860 Mr. (Sir C.) Elliott found abject poverty changed into comfort, abundance and even affluence. 'Several of them,

'however, he wrote,¹ 'are in debt, especially in the Sohāgpur and Hoshangābād parganas. Many, of course, like to keep a running account with their banker, and, paying in their revenue through him, are always a little in debt, but not enough to embarrass them at all. While engaged in assessment, I calculated that in Sohāgpur twenty-four zamīndārs were deeply in debt, and eight in Hoshangābād. In Seoni, Hardā and Chārwa there are no very heavily involved cases. In Rājwāra² the few zamīndārs are well off; and though the Rājās are deeply in debt, still the amount bears but a small proportion to their large income.' It is interesting to notice that Mr. Elliott attributed the greater indebtedness of the Hoshangābād and Sohāgpur mālguzārs to the bad administration of the munsiff's courts, which, by delaying the execution of decrees, allowed the interest to multiply. At the same time he considered that Hardā's freedom from debt, in spite of its having only recently been released from the heavy Marāthā assessment, was due to the influence and intervention of the officer in charge of the pargana, who decided civil suits. The currency of the thirty years' settlement was a period of ever increasing prosperity. The scarcity of 1877-78, to which a few proprietors trace the beginning of their embarrassments, was the only serious check. Mr. Sly, indeed, estimated that the net profits of the landlords, apart from the cultivating profits of their home farms, increased during this period by no less than 120 per cent. The value of villages rose correspondingly. Mr. Sly's personal investigations at the time of the settlement of 1891-96 showed that sale prices averaged 36 times the Government revenue. Notwithstanding this enormous access of wealth, it is undoubted that these thirty years witnessed a great increase of indebtedness. No statistics to show the total

¹ Settlement Report, Chapter III, para. 135.

² The eastern portion of the Sohāgpur tāhsil was then known as the Rājwāra pargana.

number of transfers of villages are available. But it may be noted that, though in 1865 only one proprietor was considered by the Settlement Officer to be indebted beyond prospect of redemption, in 1896 the number of villages held by mālguzārs of non-agricultural castes had increased by 99. In addition, numbers of proprietors still in possession of their estates were deeply involved. Some of these were moneylenders, who had suffered heavy losses in business transactions; but the majority belonged to the agricultural castes, including many old Gond and Korkū proprietors, who were everywhere being ousted by the Hindu. Amongst the mālguzārs of agricultural castes, Mr. Sly estimated that about one-third were quite free from debt, about one-third had a small debt on a running account of no great importance compared with their incomes, while the remaining third had heavy debts which would take some years of economy to clear, and without economy would result in disaster. The reasons for this indebtedness were thus summarised by Mr. Sly:¹

'My sincere belief is that their very prosperity has been the cause of the ruin of many. The large profits realizable from land have induced all persons with capital to seek to acquire it. The lenient assessment and the high prices of produce have combined to make it the most profitable investment available for capital, and there is not a single money-lender of importance, who has not, and is not, acquiring land. This has been intensified by two other causes, the increased consideration attached to landowners, and the accumulation of money formerly hoarded, but with settled times now available for investment. These have been the principal causes which have induced a demand for the acquisition of land; and on the other side of the picture, there have been several causes at work to produce the supply. Amongst these, the most important is the conferral of rights of transfer with the gift of the proprietary status. We have seen how in the past

¹ Settlement Report, para. 78.

'the village patels had no rights of transfer,' and how they 'were impoverished by excessive assessments. During the 'twenty years' settlement they managed to improve their 'material condition. Then came the gift of proprietary 'right, with a most lenient assessment, which was followed 'by a period of unparalleled prosperity. Prices rose, the 'seasons were good, and there was an enormous export of 'wheat. This put into the pockets of the mālguzārs such 'wealth as they had never dreamed of, and did not know how 'to control. Their expenditure increased by leaps and bounds, 'and there seemed to them no limit to their resources. If 'money was not available in the house there was the money- lender, ever ready to advance it, and the large profits in a 'good year gave every hope that the loan could easily be 'repaid. Expenditure thus began to be based upon the income 'of good years and was not contracted to meet the exigencies 'of bad years, whereas in old times, with no rights of 'transfer, the absence of credit would have forcibly reduced 'expenditure in bad years. Marriage and death ceremonies 'became more elaborate ; there were more frequent occasions for 'borrowing and more facilities for selling. Litigation became 'general about this valuable property, and it was, and is, 'carried on at great expense. The majority of the larger 'mālguzārs employ a permanent agent or *mukhiār*, whose 'principal duty is to appear in the civil cases which are al- 'ways proceeding. These, I believe, are the true causes of in- 'debt edness amongst the mālguzārs ; and I have no hesitation 'in expressing my belief, that if the gift of proprietary status 'had been unaccompanied by rights of transfer, the old pro- 'prietors would have been better off than they are to-day.' There were, however, signs at this time that mālguzārs were beginning to learn wisdom from the examples of those who had lost their villages. The amount of debt was said to have lessened, and many were making real efforts to clear themselves.

The settlement of 1891-96 though involving an enhancement of 78 per cent., the burden of which fell mainly on the mālguzārs, was admitted to be moderate and was cheerfully accepted. But an unforeseen calamity was at hand. The losses inflicted by the disastrous years of famine are described in another chapter. It is sufficient to notice here that the actual cash losses incurred through crop failures between 1894 and 1900 were estimated at more than 4 crores of rupees. Coming on the top of the revenue enhancement, this was more than the District could bear. The depreciation in the value of landed property was almost incredible. Sale prices, which in 1890 had averaged 36 times the revenue, sank in 1901 to 13 times, while sales by order of court realised only half that amount. The difficulties of the landlords were enhanced by the inability of the ruined tenants to pay their rents. No estimate can be made of the extent of indebtedness that prevailed, but something can be gathered from the transfers of villages in this period. Between 1893-94 and 1903-04, 250 whole villages and 537 shares were transferred. Taking the average share as 4 annas, this means that the equivalent of 384 villages, or 28 per cent. of the villages of the District, changed hands in 11 years. The amount realised by these sales was 29 lakhs; and when it is realised that the creditor was in many cases forcing sale, at a loss to himself, of land depreciated to about half its proper value, some idea may be obtained of the colossal burden of debt with which the Hoshangābād proprietors were loaded. The chief sufferers were the agriculturist landlords, and the capitalist element in proprietary bodies has markedly increased. On the other hand, not a few moneylenders, who had invested freely in land, incurred very heavy losses, while there were agriculturists who successfully weathered the storm. In one respect, however, the crisis through which the District passed was not unsalutary. It effected a general settlement of accounts, and inaugurated a period of economy. The hopeless insolvent has almost disappeared, and there is probably

less debt now than there has been for many years. Land is recovering its value. In the two years 1904-05 and 1905-06, prices realised by private sales averaged 22 times the abated revenue demand. At the same time the profits realised from agriculture are sufficient to liquidate debts of any reasonable size. The debts of the Fatehpur-Tekripurā estate, which pays a revenue of Rs. 20,000, are being paid off by the Court of Wards at the rate of Rs. 15,000 a year.

141. The history of the protected tenants is similar to that of the mālguzārs. Here again it has

Tenants.

to be noted that their affluence contributed to their ruin.

At the time of the thirty years' settlement, Mr. Elliott, taking as the test of a cultivator's prosperity his ability to sow his own seed-grain, noted that about half the tenants of the District were forced to borrow. In the period that followed, the protected tenants found their profits multiplying, while their rents remained almost stationary. Their temporary wealth stimulated them to extravagance, and no provision was made for the future. In good years the cultivator spent all that he got, and in bad years he went to the moneylender rather than curtail his expenditure. At the same time the grant of rights of transfer in absolute occupancy holdings increased their credit, and enabled them to borrow amounts which would otherwise have been quite beyond their reach. Land assessed at so light a rental offered an extremely profitable investment, and many such holdings, especially in the neighbourhood of towns, passed into the hands of moneylenders, who re-let them at high sub-rents. So early as 1889 a special enquiry into the indebtedness of tenants was made. Of 46 tenants whose circumstances were investigated in detail, only 12 were found out of debt. The remaining 34 owed in the aggregate Rs. 18,300, a sum equal to more than four times their rental. Almost the whole of the debt was admittedly incurred on account of marriage expenses. For instance, an absolute occupancy tenant paying a rent of Rs. 200 was

found to have spent Rs. 2,000 on marriage festivals. It is also a peculiarity of this District that the expenses of death ceremonies are almost as great. Costly litigation further added to the embarrassment of the tenantry. Considering, however, the small proportion which protected rents bore to the profits of cultivation, such a degree of indebtedness was very far from insolvency. But the protected tenants, like the mālguzārs, were considerably affected by the enhancement at the settlement of 1891-96, and it is very certain that they were in no condition to face the stress of the famine years. The difficulties of the unprotected tenants were of different origin. They had had but little share in the general prosperity. The rise in the rent-rate of ordinary holdings during the currency of the thirty years' settlement averaged 133 per cent. in Hardā, and 100 per cent. for the whole District. Rack-renting was common, and in many instances the rent had been trebled. The pernicious systems of *khot* and *batai*¹ pressed heavily on many areas. Enforced loans of seed-grain from mālguzārs at exorbitant rates of interest added to the general impoverishment. In villages where the mālguzār was indebted to a moneylender, the tenants too were generally in his grip. The aboriginal cultivator was usually in the hands of the liquor-seller, who advanced him money for liquor and seed at the modest rate of 125 per cent. It is significant that on the Bordhā plateau, a tract which is occupied almost entirely by Gonds and Korkūs, the annual Government revenue from liquor was at the time of the settlement of 1891-96 more than double the land revenue. How serious was the general burden may be gathered from the fact that after the special enquiry of 1889, the Deputy Commissioner recorded his opinion that the normal condition of two-thirds of the population was one of indebtedness. It must be remembered, however, that in every country in the world a large proportion of the capital employed in agriculture is borrowed. Lack of credit necessarily limited the borrowing

¹ See Chapter VIII. para. 202.

capacity of the unprotected tenant, and the majority, though indebted, were probably solvent. It is at least noticeable that the system of forestalling crops, the prevalence of which is a good test of the condition of cultivators, was most unusual except in some villages of the Sohāgpur tahsil and the Chārwa tract of Hardā, where the mālguzār was also a moneylender. The settlement of 1891-96, which reduced the rents of unprotected tenants by 18 per cent., should also have improved their position. But whatever the extent of their indebtedness, this much at least is indisputable ; the unprotected tenants, like their protected brothers, had no reserve to meet the strain of the famines. The disastrous years that followed left the bulk of the tenantry completely impoverished. Enquiries made during the subsequent abatement proceedings showed that their debts totalled approximately 1½ crores. In May 1901 operations for the conciliation of tenants' debts were commenced. The work, which was entrusted to Rao Sāhib Gangā Singh, was finally completed in 1905. In all, conciliation work was accomplished in 1100 villages. The liabilities of 9200 tenants, aggregating with grain debts 98 lakhs, were settled. Of this sum, 62 lakhs were wiped off, and 36 lakhs were allowed to stand. In addition voluntary remissions amounting to 12½ lakhs were made by various creditors. The total amount remitted during the conciliation operations was thus 74½ lakhs. The number of creditors concerned were about 4000, and the sums foregone by some of them were very considerable. Conspicuous among them were Seth Sheobux of Rolgaon and Seth Kanhaiyālāl Har Narāyan of Nosar, who remitted 2½ lakhs and 2 lakhs respectively. Seth Jamnādās Jaikishan of Dolaria, the Nipania and Khāparkherā estates, which were then in the Court of Wards, Seth Nanhelāl Dālchand and Seth Fatehchand Kanhaiyālāl of Hoshangābād, and Thākur Dongar Singh of Bhāngia, each remitted more than a lakh. The direct effect of these proceedings was to restore solvency to the tenant class. The value of the property of

the debtors against whom the sum of 36 lakhs was allowed to stand, was estimated at the time at 47 lakhs, and it has probably since increased. But it is hoped that more indirect benefits may have accrued as well. The advantages and economy of private settlement are now recognised, and legal proceedings for the recovery of debts are no longer taken as a matter of course. It is noticeable that whereas in the period before the famines the average number of civil suits annually instituted was nearly 8000, in 1906 only just over 4000 were brought. In addition it has been brought home to moneylenders that the impoverishment of the tenantry is not to their ultimate advantage. Loans are now advanced with more circumspection, and with a view to enriching the cultivator rather than reducing him to a condition of bond-service. Evidence of this is to be found in the support given by money-lenders to the co-operative bank movement.

PRICES.

142. Wheat and gram are the traditional food staples of Food staples. the valley, but during the famines, and

for a few years afterwards, juār, which is cheaper to grow and, being an autumn crop, gives a quicker return, acquired some importance. The staple food-grains of the hills are the smaller millets, kodon and kutki. The accompanying table shows the average quinquennial rates for wheat and gram since 1882, and for juār since 1861. For the period from 1822 to 1860 the figures have been worked out from the sixmonthly rates given in Mr. (Sir C.) Elliott's settlement return¹; from 1861 to 1890 they are taken from 'Prices and Wages in India,' and from 1891 to 1906, from the supplements to the Central Provinces Gazette.

Seers per rupee.

Period.	Wheat.	Gram.	Juār.
1822-25	51	65 .	...
1826-30	51	63	...
1831-35	23½	37	...

¹ Settlement Report, Chapter III, para. 65. One *kaohshā māni* = 216 seers.

Period.	Wheat.	Gram.	Juār.
1836-40	39½	46	...
1841-45	44½	50	...
1846-50	31	39	...
1851-55	41	59½	...
1856-60	44½	54	...
1861-65	21½	24½	31
1866-70	15½	15½	17
1871-75	18½	21	23½
1876-80	13½	18	18½
1881-85	18½	27½	27
1886-90	15	20½	19
1891-95	14	19	18½
1896-1900	10½	13	15
1901-1905	13	17½	19

The rise during the period 1831-35 was caused by the rust of 1832; in 1832-33 wheat was at 17 seers to the rupee, while gram in 1833 was at 28 seers. From 1836 to 1850, during the currency of the twenty years' settlement, prices gradually rose, indicating the beginning of the export trade and the growing prosperity of the District. The next decade, however, shows steady decrease. This was due partly to the cession of Hardā, where, under the influence of a light assessment, cultivation expanded and the market was flooded, and partly to the dislocation of the export trade during the disorders of 1857-58. This period lasted until 1862, when the American War of Secession, by creating an unprecedented demand for cotton, sent up prices to a figure unknown before, except in famine years. There was no large increase in cotton growing in Hoshangābād itself, but the diversion of large areas from cereals to cotton in other parts of India caused a general rise in the prices of food-grains. In Berār, in particular, so much land was given up to cotton that the area left for food stuffs was not enough to support the population, and Hoshangābād was the nearest export market. Moreover the opium grown in Mālwā nearly doubled between 1857 and 1861,

occupying about 320,000 acres which had formerly grown food-grains. In addition, though Hoshangābād itself, thanks to the fertility of its soil, suffered but little from the "Bundelkhand famine" of 1868, yet prices were naturally affected by the distress in surrounding Districts. But besides these ephemeral conditions, a lasting reason for an increased demand was to be found in the growing wealth of the poorer classes, which was expended on better food. In Nimār and Mālwā for instance, where juār had hitherto been the staple diet, there was now an ever-increasing demand for wheaten flour. Finally, the year 1870 saw the completion of the railway, which runs from end to end of the District and is within 12 miles of almost every village. Through communications were thus opened with Bombay and Europe, and the export trade went up by leaps and bounds. Subsequently, the famine of 1878 sent up wheat to 12 seers per rupee, and the last ten years of the thirty years' settlement witnessed a steady rise. Seldom indeed have prices sunk below the high rate which had prevailed during the seemingly abnormal period of the American War. At the settlement of 1891-96, it was calculated that the rise in prices might safely be estimated at from 32 to 16 seers for wheat, and from 40 to 20 seers for gram, giving an increase of 100 per cent. over the whole District. This has been fully justified by the event, and the average price of wheat from 1904 to 1906, during three years of normal prosperity, was 13½ seers. The highest prices yet known are 7 seers and 8 seers in 1897 and 8 seers and 9 seers in 1900 for wheat and gram respectively. The area under juār is ordinarily small, and sometimes it is not even purchaseable. Its chief use is to serve as a stop-gap before the ripening of the spring harvest, and there is no real demand for it in preference to wheat and gram. Its price thus rises and falls in sympathy with the genuine staples, generally being a trifle lower. From 1861 to 1880, the average price was 22½ seers to the rupee, and from 1881 to 1895 21½ seers. Then followed the famines, when an autumn grain was urgently required, and in 1897 and 1900 the price was

11 seers to the rupee. At the same time the area under juār increased remarkably. Then, as the District recovered, and the spring cereals were restored to favour, the supply of juār was found to exceed the demand, and in 1903 the price went down to 27 seers to the rupee, sinking to 34 seers in May of that year. Juār cultivation at once contracted to its old limits, and its price is again fixed by the considerations that prevailed before the famine, averaging for the 3 years from 1904 to 1906, 16 seers to the rupee. Kodon and kutki, though the staple food of the jungle villages, are hardly marketable articles. Each man grows enough for his own needs, and they are often the medium rather than the object of exchange. Thus their price cannot always be ascertained; but, as might be expected, it appears to rise and fall with the fluctuations of prices generally. At the time of the thirty years' settlement it was 43 seers to the rupee; at the end of that settlement it had risen to 22 seers; during the ensuing years of scarcity it went steadily up, reaching 9 seers in 1900, and with the recovery it has gone as steadily down, averaging 16 seers for the four years 1902 to 1905.

143. During the currency of the thirty years' settle-
ment, the other grains did not usually

Other crops.

go up in price to the same extent as wheat and gram; but there was a general rise in sympathy, estimated by Mr. Sly as averaging about 75 per cent. Tūr rose from 25 seers per rupee to 14 seers, rice from 14 to 10 seers, til from 15 to $8\frac{1}{2}$ seers. Similarly in the famine year there was a heavy rise in food-grains, reaching its highest point in 1897, when tūr sold at $6\frac{1}{2}$ and rice at $7\frac{1}{2}$ seers per rupee. Tūr has since gone down to more normal rates, averaging 11 seers per rupee during the 5 years ending 1905. But it is noteworthy that the price of rice has remained high, standing at $8\frac{1}{2}$ seers per rupee in 1904-05. As the area under rice has at the same time markedly contracted, this seems to indicate a failing supply rather

than an improved demand, rice even at such a rate being regarded as an unprofitable crop. Til has also continued to rise, and in 1906 the price was $5\frac{1}{2}$ seers per rupee. This, however, has been caused by an increased demand ; til has become a valuable crop, and its acreage is expanding. Linseed, again, is a crop which is less and less grown locally, and a diminished supply had raised its price in 1905 to $6\frac{1}{2}$ seers, which is its highest recorded rate ; the average rate for the decade ending 1900 was about 10 seers. The price of cotton varies according to the condition of the great markets. During the 15 years ending 1905 it was never higher than $6\frac{1}{2}$ lbs. or lower than $3\frac{3}{4}$ lbs. to the rupee, which were the rates in 1897 and 1904 respectively ; and the average for the whole period was 5 lbs. to the rupee. Cotton seed sells at 28 seers to the rupee.

144. Between 1861 and the abolition of the salt customs line in 1874, the price of salt

Miscellaneous.

averaged about $5\frac{1}{2}$ seers per rupee ;

between 1875 and 1890 about 9 seers ; and from 1891 to 1903 about 10 seers. On the reduction of the salt tax in 1903, the price went down to 11 seers, while the additional reductions in 1905 and 1907 lowered it to $12\frac{1}{2}$ seers and 18 seers respectively. The price of *ghī* was $1\frac{1}{2}$ seers per rupee at the thirty years' settlement, 1 seer at the settlement of 1891-96, and it is now 1 seer in the District and 15 chittacks at headquarters. Milk is not usually sold in the villages, but at Hoshangābād the price of unadulterated milk is 8 seers per rupee. Sugar imported from the North-West Provinces is sold at $6\frac{1}{2}$ lbs. per rupee, and Mauritius sugar, which is principally used in this District at 10 lbs. Lucknow *gur* sells at 14 lbs. per rupee and the superior "Berāria" *gur* of Betūl at 10 lbs. Firewood is sold by the cartload, which varies in weight from 8 to 12 maunds and in price from 1 to 3 rupees. Grass is sold at 400 to 600 small and 250 large *pūlas* per rupee.

WAGES.

145. The official returns give Rs. 5 to Rs. 8 as the monthly wage of an able-bodied agricultural labourer from 1893 to 1897. Except for Statistics of wages. the two bad years 1898 and 1900, when wages sank to Rs. 4 and Rs. 4·8 respectively, a constant rate of Rs. 5 was maintained until 1904. Since then it has varied from Rs. 5·8 to Rs. 6. It should be noted, however, that the ordinary labourer employed by a mālguzār or big tenant is usually paid in grain, which is equivalent to about Rs. 4 or Rs. 5 a month cash, as against Rs. 3 at the time of the thirty years' settlement. Artisans are shown as earning Rs. 12 to Rs. 30 a month from 1893 to 1895; while for the last ten years the rate usually returned has been Rs. 15.

146. The employment of agricultural labour varies somewhat from tahsil to tahsīl, and Farm-servants. wages are almost always higher in the west than in the poorer east. Wages are often paid in grain. Hence, owing to the rise in prices, it will usually be found that grain wages have decreased since the time of the thirty years' settlement, while the corresponding cash wages have increased. Agricultural labourers are of two classes; those who are permanently employed as farm-servants on a fixed wage, and those who are hired by the day or for some special work. The first class includes the bailiff or *zirāti*, the ploughman or *harwāha*, and the herdsman or *charwāha*. Gonds and Korkūs are considered to be the best servants. A bailiff, who is also called *chhirai* in Sohāgpur, is employed by many mālguzārs, even of the cultivating castes, to assist in the supervision of the home farm. He is engaged for the year, and at the time of the thirty years' settlement his wages were 6 *kachchā manis*¹ of grain per annum, or Rs. 4 to Rs. 5 cash monthly, together with two cloths; at the settlement of 1891-96 he was

¹ One *kaohoka mani* is 5 maunds 16 seers, or 432 lbs.

very seldom paid in grain, and usually got a monthly cash wage of Rs. 5 to Rs. 6. Generally speaking, the bailiff's wage is one *māni* a year, or R. 1 a month, more than the ordinary local wage of the ploughman. The latter, who is also called *barsudiā* in Hardā and Seoni tahsils, is engaged by the half year. A plough of land averages from 25 to 30 acres, and every cultivator occupying more than that requires the assistance of a ploughman for each additional plough. The period of employment begins at the end of Jeth (May—June); and on the conclusion of the six months' engagement half are usually discharged. For instance, if a mālguzār cultivates 12 ploughs of land, he will employ 12 ploughmen during the working season of six months and only 6 during the non-working season. The wage is almost always paid in grain, and is ordinarily one *kachchā māni* more in the west of the District than in the east. At the time of the thirty years' settlement this wage was 5 *kachchā mānis* a year in the east and 6 in the west. With the rise in prices the rate was lowered by one *māni*. The recent improvement in wages has not usually affected the quantity of this remuneration, but it has become the custom to demand all wheat instead of half wheat and half gram or juār. A ploughman employed for only half the year receives half the yearly wage; but he is often re-engaged for 3 months from Chait (March, April) to Jeth (May-June) to assist at the harvest; for this period his wage is usually 16 *kuros*¹ of grain for Chait and 8 *kuros* for the other two months. In addition to the regular wage, the ploughman receives various perquisites and presents at sowing time and harvest and on other occasions, according to the custom of the locality. A private *charwāha*, who is known as *parkhya* in Hardā and Seoni, is only employed by substantial cultivators. If a man, his wage is the same as the ploughman's; but the herdsman is usually a boy, when his wage varies according to the number of cattle that

¹ One *kuro* is 9 seers, or 18 lbs

he has to watch. At the time of the thirty years' settlement, the usual rate was 3 *kachchā mānis* of grain a year, but with the general lowering of grain wages this has been reduced to 2 or even 1. Though required for the whole year, the herdsman, like the ploughman, is ordinarily engaged for six months at a time. One herdsman is required for every 20 or 25 head of cattle. Poorer cultivators employ one between them, while others send their cows and young stock to be grazed with the common herd by the village Ahir, who charges a monthly fee for each head of stock, varying in different tahsils from 1 to 4 *pais*¹ of grain or from 2 to 8 annas cash. There is one other servant employed by māl-guzārs and big tenants, known as the *gobarwāli* whose duty it is to remove cowdung, make cowdung cakes and sweep the house. A *gobarwāli* is ordinarily a woman, and her wage is 3 *kachchā mānis* of grain a year. The wives of small tenants generally do this work for themselves, but occasionally two or three employ one *gobarwāli* between them.

147. The wages for casual labour have varied in much

Casual labour. the same way as for permanent service, except that there was a marked drop

during and immediately after the famines, especially in towns. Prior to the famines, town labour was paid at 2 to 4 annas a day ; in 1902 the daily wage was $1\frac{1}{4}$ to $2\frac{1}{2}$ annas ; and now it is 3 to 4 annas. The wage for agricultural labour was $1\frac{1}{2}$ annas a day at the time of the thirty years' settlement, 2 annas at last settlement, and it is now estimated at $1\frac{1}{2}$ to $2\frac{1}{2}$ annas ; it is, however, nearly always paid in grain and varies according to the nature of the work. Cultivators usually employ casual labour for sowing, weeding the autumn crop, watching the crops, cotton-picking and reaping. For sowing the daily wage is 3 to 4 *pais* of grain. Very often, however, it is done by contract, Rs. 3 to Rs. 4 being given for sowing 30 acres of land in the east, and Rs. 4 to Rs. 6 in Hardā ; this takes about 20 days, so that the daily wage is

¹ One *pai* is 90 tolas, or $2\frac{1}{4}$ lbs.

about 3 or 4 annas. The boy or woman who feeds the drill is paid a lump sum of Rs. 2 in cash for the whole time of sowing, which is the same rate that prevailed at the time of the thirty years' settlement, though before the recent famines as much as Rs. 3 was given. Weeding the autumn crops is sometimes done by contract, but generally on a daily wage according to the prevailing rate for labour ; sometimes as much as 4 annas a day is paid for cotton weeding in Hardā. Watching, or *rakhwāli*, is paid for by the month in the open plain. The rate of payment at the thirty years' settlement was 10 to 12 *kuros* (180 to 216 lbs.) of grain a month, while now it is 6 to 8 *kuros* (108 to 144 lbs.). One watcher with his family will guard 50 or 60 acres. Near the hills, the wage for the whole period of watching is usually one-quarter of the seed sown. Thus for one *māni*, or 5 acres of land, the watcher gets 6 *kuros* (108 lbs.), and one watcher is usually required for every 4 *mānis* or 20 acres, so that his wage for about 4 months' watching would be one *kachchā māni* of grain (432 lbs.). Cotton-picking is paid for at the rate of $\frac{1}{4}$ anna a seer at the first picking, and 1 anna a seer at subsequent pickings. The reaping of the spring harvest is usually done by contract, the rate all over the District being 6 *kuros* (108 lbs.) of grain for every *māni* or 5 acres of land. This rate has remained the same in Hardā since the thirty years' settlement, but in the eastern tahsils it was formerly 8 *kuros*, the wage in this instance being lower in the west than in the east. In the eastern tahsils another recognised wage for reaping is one sheaf in every twenty. This is a high rate, and in the famine period was first reduced to one sheaf in thirty, and then superseded by a daily wage of 1½ *pais* (3 lbs. 6 ozs.) of grain, which was generally the unwholesome *tiurā*. Latterly, however, with the rise in wages, the old system and the old rate of one in twenty have often been resumed. Field labourers are drawn from all castes, but the Gonds of the hills have the best reputation for good work and straight dealing. While the farm-servant has a

comfortable and more or less assured position, the casual worker leads a somewhat precarious life. Mr. Elliott has given the following account of his occupations and aims¹ :—‘In the ‘rains, there is weeding to be done, and *kharif* crops require ‘watching, especially *juār*; but in the villages which have no ‘*kharif*, the labourer can get nothing to do except watching ‘the grasses *bîr* or preserves. In October he gets from Rs. 2 to ‘Rs. 3 for fifteen or twenty days’ work in sowing; then he can ‘get odd jobs in fencing and bringing wood; then he is employ- ‘ed in watching the crops. Then follows the harvest, when ‘there is abundant employment for all, and every able-bodied ‘man can earn five seers a day, while wife and children earn ‘from two to four seers. This, with the gleaning, supplies the ‘labourer with food for two or nearly three months till the ‘rains begin. In jungle villages, where there is much fencing ‘and watching to be done, a labourer can in this way get a ‘constant series of jobs which pay him fairly well; in the open ‘valley there is less work of this kind, but there is a greater ‘demand for grass and wood, and the labourer can live by ‘supplying these things. His great ambition is to become a ‘cultivator. He can generally pick up a calf and heifer some- ‘how or other, and he keeps them for next to nothing till he ‘has a pair of young bullocks; then he borrows food-grain ‘for a year and sets up on his own bottom as an independent ‘cultivator.’

148. Eleven village servants are recognized in Hoshang-
ābād. They are: (1) the Patel, (2)
Village servants. Patwāri, (3) Kotwār, (4) Barhai or carpen-
ter, (5) Lohār or blacksmith. (6) Dhobi or washerman, (7) Nai
or barber, (8) Chamār or leather dresser, (9) Gārpagāri or
medicine man, (10) Parsai or village priest and (11) Potdār
or treasurer. Of these, the first eight are found everywhere;
the ninth is not universal; the tenth is found everywhere,
but hardly ranks as a village servant, being paid for his
services rather according to the capacity of the payer, than
by any fixed rate or *haq*. The Potdār was always confined

¹ Settlement Report, Chapter III, para. 63.

to towns and large villages, and his office is now obsolete. Jungle villages often boast an additional priest, known as the Bhumkā. Latterly, too, the Kumhār or potter has acquired the position of a village servant. Of the patel it is unnecessary to speak here ; his present position and its origin are fully described in Chapter VIII. The patwāri and the kotwār, too, are now practically Government officials, and are noticed as such in Chapter IX. The other village servants generally receive a fixed *haq* or due, which, being traditional, has not varied in amount since the thirty years' settlement. In times of scarcity the cultivator may not pay the full due, but the servant's claim remains the same. The Barhai and Lohār repair agricultural implements, and also make new ones, if supplied with material. Their emoluments for every plough of four bullocks are 6 *kuros* (108 lbs.) of grain, with a *dhūli* or $\frac{1}{2}$ *kuro* (9 lbs.) at the time of sowing, and 5 sheaves or $1\frac{1}{2}$ *kuros* ($22\frac{1}{2}$ lbs.) at harvest, in the eastern tahsils ; and 6 to 8 *kuros*, with $\frac{1}{2}$ *kuro* at the time of sowing and a *kuro* at harvest, in the west : they are also allowed a day's gleaning, which probably amounts to another *kuro*. The Dhobi formerly received a fee from every married couple ; but now poor tenants wash their clothes themselves, only calling in the Dhobi at births and deaths, when he receives from 4 annas to a rupee according to the means of his client. Richer tenants wash their *dhotis* every day themselves, and give out their other things to the Dhobi, for which they pay $\frac{1}{2}$ anna a cloth. The Nai's duties are to shave every male member of the family once in 15 days, and he receives 2 to 3 *kuros* (36 to 54 lbs.) of grain a year for every man with a moustache, with the same perquisites at sowing time and harvest as the Barhai and Lohār. The Chamār supplies the *jot*, or neck rope, and the *nāri*, or leather thong, to tie the bullocks in the plough ; he also mends the bullock gear and the shoes of the tenant and his servants, but charges for making new shoes. His due is 4 *kuros* (72 lbs.) of grain for every plough, with the same perquisites as the carpenter and blacksmith.

In addition the hides of dead animals are usually regarded as his, though the owner may claim them if he wishes. The Gārpagāri, who is always a Nāth by caste, is not found in every village. His office is to avert hail, and his fee is 1 to $1\frac{1}{2}$ *kuros* (18 to 27 lbs.) of grain a year for every plough, irrespective of the success or failure of his incantations. The Parsai is the professional astrologer of the village, and tells the cultivators favourable days for sowing and winnowing. He also teaches them the formulas of the Machhandrī and Deothān worship and so on. The patwāri often acts as Parsai, and though no regular fee or *haq* attaches to the office, he plays a part both honourable and lucrative at marriages and other religious ceremonies. The Potdār was of importance in the days when there were mints at Sohāgpur and Hardā, and when Bhopāl, Nāgpur, Ujjain and all sorts of rupees were current here; he used to live in the chief town or village of the *tāluka*, and received about half a *kuro* (9 lbs.) of grain a plough from every cultivator for testing all rupees. The Bhumkā is the Gond or Korkū priest, and is rare except in the villages of the jungle; his chief duty is to avert the depredations of tigers. The Kumhār supplies earthen vessels, and receives the same dues as the Chamār. In addition to these, the Basor, or basket weaver, though not a regular village servant, claims an annual contribution from the cultivator for sowing and winnowing baskets and so on; this sum varies, of course, according to the purchaser's requirements, but an average tenant expends about Rs. 2 a year on wicker-work. In jungle villages, the cultivators often subscribe to employ a *shikāri*, or professional hunter, whose duty it is to protect the crops from wild animals. In this District, too, it is the custom at sowing and harvest time for the cultivator to give to every one who comes. The Brāhman, Nāth, Gosain and Fakir beg; the Dhīmar brings *singhāra*, the Teli tobacco, the Kāchhi chillies, the Baniā *gur*, and so on; and each takes a handful or two away with him.

149. It is now possible to make a comparison of the profits of agriculture at the time of the *Cost of cultivation.* thirty years' settlement and at the present day. Such calculations, neglecting, as they do, both the human factor and the chances and changes of the seasons, can only afford a very rough guide ; and nothing will be gained by too fine an elaboration. In the following comparison the unit is the plough of land of about 25 acres, or to use the local standard of measure, of 5 *kachchā mānis* ; it is cultivated by the tenant himself with a plough of four bullocks, and to simplify calculations, it will be supposed that the whole area is sown with wheat. The basis of the comparison must be the variation in price ; and Rs. 7 a *kachchā māni* of grain, or 31 seers per rupee, may be taken as a fair average price at the time of the thirty years' settlement, while Rs. 15 a *kachchā māni*, or 12½ seers per rupee, is the standard price in 1907. The cultivator of 5 *mānis*, then, will do his ploughing himself, but he will require 4 bullocks ; their working life may be reckoned as 8 years, so that the annual outlay for bullocks is one-eighth of the whole ; the price of a bullock in 1863 was about Rs. 16, and in 1907 about Rs. 30 ; the annual outlay will thus be Rs. 15 now as against Rs. 8 then. The feed of his bullocks will cost him something, and he will have to pay his share of the wages of the village herdsman. Being only a small cultivator, he will borrow 5 *kachchā mānis* of wheat seed, which he will have to pay back with interest at the ordinary rate of 25 per cent. Sowing and watching will be done by himself and his family, but he will have to pay small sums for fencing his threshing floor and for materials to repair and renew his agricultural implements. His crop will be reaped by hired labour at the rate of 6 *kuros* of grain per *māni* of land, or 30 *kuros* (= 1½ *kachchā mānis*) of grain in all, while he, with the help of his wife, will do the threshing and winnowing. Finally he will have to pay the dues of the village servants, which will

amount altogether to about one *kachchā māni* of grain. These items can now be summarised and compared according to the prices and wage rates current at the time of the thirty years' settlement and in 1907 :—

ITEM.		AT 30 YEARS' SETTLEMENT.	1907.
		Rs. A. P.	Rs. A. P.
Cost of bullocks	...	8 0 0	15 0 0
Feed of bullocks	...	12 8 0	20 8 0
Share of herdsman	...	4 8 0	6 0 0
Seed and interest	...	43 12 0	93 12 0
Reaping	...	8 12 0	18 12 0
Threshing floor	...	1 8 0	2 0 0
Agricultural implements	...	2 8 0	3 0 0
Village servants	...	7 0 0	15 0 0
TOTAL	...	88 8 0	174 0 0

The normal yield may be taken as six times the seed, or 30 *kachchā mānis* of grain for the whole holding. Thus, at the same prices, the value of the crop would be Rs. 210 at the time of the 30 years' Settlement, and Rs. 450 in 1906-07, and the balance of profit, out of which the cultivator has to pay his rent and support himself and his family, would be Rs. 121-8-0 then and Rs. 276 now. The average rental for wheat land was R. 1 an acre then and is Rs. 2 an acre now, so that his total net profit would be Rs. 96-8-0 and Rs. 226-0-0 then and now respectively. The above estimate will require some alteration when the land belongs to a large proprietor, who employs hired farm-servants, but on the other hand does not borrow his seed-grain.

150. The prosperity and style of living alike of the land-

holding and of the labouring classes

**Material condition
of the people.**

vary very much in different parts of the

District. The standard of wealth is much lower in the east than in the west, while the aborigines of the south are far behind their Hindu neighbours of the plains. In towns, again, a tendency to use European goods and to copy European habits is often accompanied by a desire to foster Indian industries by giving preference to articles of native manufacture. Generally speaking, the

ordinary style of living is probably not so good now as in the prosperous days before the famines of 1897 and 1900, when the standard of comfort was higher than in any other District of the Province, except perhaps Nāgpur and Wardhā. In those days there was undoubtedly a good deal of extravagance, especially amongst the well-to-do mālguzārs, who considered it derogatory to their dignity to walk, to do manual labour, or even to supervise the cultivation of their farms. The larger cultivators too always travelled in a bullock cart instead of walking, and there was a markedly increasing tendency to employ hired labour for the ordinary operations of agriculture. The losses of the famines have made it necessary to lead more laborious days ; and the mālguzār has learnt by bitter experience the advantages of thrift. But an improved solvency has more than compensated for the loss of luxuries. Perhaps, the most noticeable improvement of recent years has been in sanitation. The connection between health and cleanliness is indeed scarcely realised, and sanitation is regarded as a *sarkāri hukm*, or Government order, rather than an act of commonsense ; but the effect is that it is rare to find a dirty and ill-swept village site or a polluted water-supply. In forest tracts dwelling-houses are still usually made of wattle, mud and thatch, costing about Rs. 10 to build ; but in the valley every one except the poorest labourer has a tiled roof and walls of consolidated mud or unbaked bricks. An ordinary tenant's house will cost from Rs. 50 to Rs. 100 ; such a house will stand in its own *bārā* or compound, and in the east of the District will usually contain only two rooms, one for the family and the other for the cattle ; but in the west four rooms are common. The houses of mālguzārs and substantial tenants are much more imposing structures, especially in the wealthy west, and may cost as much as Rs. 5,000. Some of the older houses show very fine wood-work and excellent carving, but since good timber has become expensive and not easily procurable, village architec-

ture has deteriorated. The mālguzār's house is easily distinguished by its elaborate main entrance, within which is a square courtyard surrounded by cattle sheds and granaries. Indoors solid furniture and utensils of native make will be found. Chairs, tables, lamps and crockery of English design are frequently seen in towns, but rarely in villages, unless the mālguzār has come much in contact with Europeans. Caste prejudices have prevented many innovations in food. Wheat is the staple food of all who can afford it, while the poorer classes are content with juār. In the hilly tracts the smaller millets, kodon and kutkī, are generally eaten. Rice is neither produced nor consumed to any great extent. An interesting result of the wheat export trade is the increasing use of *pissī* wheat instead of *jalālia*; *pissī* does not make such good unleavened bread, but, being in greater demand for purposes of export, is much more frequently grown, and the surplus is used for home consumption. Cheap imported sugar has generally taken the place of *gur*; but amongst the rural population the more well-to-do still eat home-made or Betūl *gur*, which they much prefer. The ordinary diet is unleavened bread in the morning, and *dalia*, which is a liquid preparation of wheaten flour, salt and other seasonings, in the evening. Milk was formerly consumed at home, but it is now generally made into *ghī* and exported. More elaborate dishes, the recipes of which generally come from Upper India, go to make up the meals of a rich townsman. The food of an ordinary mālguzār or substantial tenant, with a family of four, will cost from Rs. 15 to Rs. 20 a month. For clothing, English piece-goods have to a large extent supplanted country cloth, which has, however, the reputation of being more durable, and is often preferred by the agricultural classes. The cost of clothing a family in humble circumstances would be about Rs. 15 a year, while rich tenants and mālguzārs will spend from Rs. 40 to Rs. 80. Ornaments are freely worn by both sexes. They are generally silver, but the richer classes wear gold

above the waist, while the poor wear ornaments of *kānsa* or zinc. The gold head ornament, or *rākhari*, is often seen in the east on women of almost every class. Ornaments are usually given to the bride at the time of marriage, varying in value according to the wealth and position of the family ; in a well-to-do family of good social standing from Rs. 300 to Rs. 400 would probably be spent in this way. Ornaments are still regarded somewhat in the light of an investment, though in towns, with the growth of commercialism, investment in business concerns is beginning to take the place of ornaments and the hole beneath the hearth as the proper depository for savings. Minor luxuries, such as bicycles, watches, soda water and cigars, are commonly used in towns, but are seldom seen in rural areas. Kerosine oil and matches are familiar throughout the valley ; but the inhabitants of the forest tracts still use the *chak mak* or flint and steel.

MANUFACTURES.

151. Hoshangābād is first of all an agricultural District, and manufacturing for purposes of export **Weaving and dyeing.** is very rare. Such manufactures as exist are mainly designed to supply the local demand for articles of every-day requirement. In former years the weaving trade was flourishing, until the enormous demand for cotton during the American War of Secession raised the price of the raw material beyond the weaver's means. Cotton was exported, and English piece-goods were imported. The pressure of the famine years still further diminished the number of persons supported by the cotton industry, which sank from 21,000 in 1891 to 13,000 in 1901. Locally woven cloth is, however, considered more durable ; and though mill-spun thread is always used, the weaving industry is by no means extinct. The principal centres are Sobhāpur, Nāharkolā near Seoni, and Timarnī. The weavers of Sobhāpur are mostly Katias and number about 100 households ; they weave turbans (*pagrīs*), which are somewhat finer work, as well as country cloth. The Balāhis of Nāharkolā, who are

about 60 households strong, make only country cloth. At Timarni there is a caste of weavers called Khangārs, who are the old inhabitants of the village and now number about 40 households. But weaving on a small scale is carried on in many villages, and country cloth can be purchased at almost any bazar. In the Hardā and Seoni tahsils the weavers are usually Balāhis, in Hoshangābād Koris and Mehrās and in Sohāgpur Katias and Kotwārs. The cloths woven by the Mehrās and Koris of Simrodhā, and by the Balāhis of Raipur, have a good local reputation. Katias, who alone are capable of fine work, are found at Sohāgpur and Seoni, as well as at Sobhāpur. Tasar silk was formerly woven at Sohāgpur, but the industry is now extinct. The dyers of the District are of two classes: Rangrez, who only do colouring work and generally use indigo or *nīl*, and Chhipas, who print as well as colour. The industry is of some importance at Sohāgpur, where the water of the river Palakmati, which flows through the town, is considered to have qualities valuable for dyeing. The bulk of the cloth dyed here is imported from the mills of Ahmadābād and other places by Khatri Musalmān merchants, who again export the cloth, dyed and printed, to Jubbulpore, Nimār and Bhopāl. Locally made cloth is also dyed here to some extent. Articles for export are coloured with foreign dyes, but for local work the native indigo, which is imported from Upper India, is still used by the Rangrez. A considerable amount of dyeing is also done at Hardā and Timarni by Rangrez and Chhipas, who generally work for hire for weavers. Native dyes are employed here more than at Sohāgpur. The Rangrez use indigo, while the Chhipas make a very fast dark red colour from the root of the *al* or madder plant. Myrabolans for fixing the colour are obtained from the *harrā* trees (*Terminalia Chebula*) of the neighbouring jungles.

152. Hammered ornaments of gold and silver are made
 for local sale by Sonārs in Hoshangābād
Metal Work. and the other municipal towns, and in

almost every village of any size throughout the District. They are often made hollow and filled with lac. The workmanship is undistinguished. Gold ornaments are not common. The usual kinds are the nose-ring and neck ornaments for females, and for men neck ornaments, finger rings and earrings. The principal silver-ware is neck, hand and foot ornaments for females. There is a considerable brass working industry carried on by Kaserās at Hoshangābād, Handia, Hardā and Bābai. Ordinary vessels, such as dishes, *lotās*, *gunds* and cooking vessels, are made, and sent to Betūl, Nimār, Khāndesh and Indore, as well as to local fairs and bazars. Sheets of brass are imported from Bombay for their manufacture. Occasionally also old utensils are melted down, but the process is tedious and expensive. Brass ornaments, anklets, toe-rings and earrings are moulded at Sohāgpur by Kaserās; and ornaments of *kaskut* (a mixture of copper and zinc) are manufactured by Kaserās both at Sohāgpur and Sobhāpur. The work of Lohārs is practically confined to the manufacture and repair of agricultural implements in towns and villages. At Timarnī, however, ornamental betel-nut crackers, called *sarotā*, of iron and brass, are made by a few Lohārs, and exported to the surrounding Districts and to the North-West Provinces. A sample was sent to the Delhi Darbār of 1902. Nut-graters, or *kisnī*, are also made by a Hoshangābād Lohār and exported, principally to Central India. A little English iron work, such as the manufacture of safes, tongā axles, and so on, is done by native firms at Hardā, Itārsi and Pachmarhi.

153. The industries which employ most hands are spread all over the District, and are not *Miscellaneous.* concentrated in any particular place. In 1901 there were over 5,000 carpenters, and every village of any size has its Barhai to make and repair the woodwork of carts and agricultural implements. Bamboo baskets, mats and so on are everywhere woven by Basors, while the Gonds of Rājaborāri make bamboo *kalgīs* or receptacles

for grain. Mats and fans of date-palm leaf are made by Māngs. The leather industry supported 11,000 people in 1901. Leather thongs and other articles needed for agriculture, as well as country shoes, are made by every village Mochī. Boots are also manufactured in the towns, and a Hardā firm exports boots and shoes of good quality to Indore. Of the more special industries, Sohāgpur pottery has a good local reputation, and is exported to the neighbouring Districts and to Bhopāl. A tile factory was established in 1906 by an Itārsi firm at Khajanpur, near Bāgra railway station, where excellent tiles, bricks and water pipes are produced. Bricks for local use are made by Kumhārs at several places. English agricultural implements are produced on a small scale at Khāparkherā, and also at the Friends' Mission workshops at Rasulia, near Hoshāngabād, where excellent furniture and woodwork of every description is turned out. Among smaller articles, the bamboo walking sticks of Hoshangābād are the most important, and are exported to Bhopāl and other places. The bamboos are mostly brought from Borī forest, and "Pachmarī walking stick" is the usual trade description. Toys, lac bangles and articles of earthenware are also manufactured at Hoshangābād. At Hardā cloth caps are made up from imported materials. The tobacco pipes or *chilams* of Khaparia also deserve notice.

154. Hardā is the centre of the cotton-ginning industry.

Ginning and pressing factories. The first factory was established by the

firm of Seth Rādha Kishan Jai Kishan in 1898, and five others have since been added. In 1906-07 there were altogether 250 gins working in Hardā town, and the amount of cotton ginned was 27,000 maunds, valued at 7 lakhs. In the tahsil there are factories at Khirkiān and Timarnī, which together contained 60 gins in 1906-07, and ginned 13,000 maunds of cotton. The only other ginning factories in the District are at Piparia and Itārsi, with 24 and 10 gins respectively. Both are only

recently started, and the outturn of ginned cotton is so far small. The Piparia factory, however, is likely to receive considerable quantities of raw cotton from the Sohāgpur tahsil and Bhopāl, and appears to be a promising enterprise. There are three pressing factories at Hardā and one at Khirkiān. The longest established is that of Baijnāth Shrināth at Hardā, which was started in 1901. Each factory contains one press, and the total amount of cotton pressed in 1906-07 was 24,000 bales of the value of 14 lakhs.

155. The basis of all weights and measures in use in the District is the tolā, which is equivalent to the weight of a Government rupee, and the *pai*, which contains from 75 to 80 cubic

Weights and
measures.

inches. The *pai* was formerly a hollow vessel made of teak, narrow at the neck and slightly bulging out lower down, but a tumbler-shaped brass measure is now ordinarily used. The common test of a *pai* is that its contents of wheat weigh 90 tolās. The measures of capacity ordinarily employed are :—

Hoshangābād & Sohāgpur.

1 <i>pai</i>	= 90 tolās.
8 <i>pais</i> , or 9 seers	= 1 <i>kuro</i> .
3 <i>kuros</i> , or 27 seers	= 1 <i>man</i> .
8 <i>mans</i> , or 216 seers	= 1 <i>māni</i> .
100 <i>mānis</i> , or 540 maunds	= 1 <i>māngāsi</i> .

Seoni & Hardā..

1 <i>pai</i>	= 90 tolās.
8 <i>pais</i> , or 9 seers	= 1 <i>kuro</i> .
4 <i>kuros</i> , or 36 seers	= 1 <i>man</i> .
12 <i>mans</i> , or 432 seers	= 1 <i>māni</i> .
100 <i>mānis</i> , or 1,080 maunds	= 1 <i>māngāsi</i> .

The *māni* of the west is thus double that of the east, which sometimes causes complications. The former is known as the *pakkā māni*, and the latter as the *kachchā māni*. The above measures are only used for grain, and there is a slight variation for different kinds of grains. For while in the wheat measure, which is the standard given above, a *kuro* is equivalent to 9 Government seers, it contains only 8½ seers of gram, but 9½ seers of rice, urad, masūr or tiurā. Everything else is sold by weight, usually the Government seer and maund. But for certain articles special weights are in use. *Ghi*, salt, *gur*, sugar and other *kirāna*, or articles ordinarily

sold by Baniās, have a different scale of weights, known as *pakkā* weights, for wholesale transactions. This is:—

95 tolās	=	1 seer
40 seers	=	1 maund.

The *pakkā* maund thus contains $47\frac{1}{2}$ Government seers. The Government seer is the standard used for retail sales, but an additional weight, called *paserī*, which is equivalent to 5 Government seers, is also in vogue; these weights are known as *kachchā*. In the Seoni tahsīl clean cotton and *ghī* are sold according to two standards:—

80 tolās	=	1 seer
44 seers	=	1 maund;
or 88 tolās	=	1 seer
40 seers	=	1 maund.

In both cases the maund is equivalent to 3,520 tolās or 320 tolās more than the Government maund, and is called *pakkā*. In Hardā, again, the standard used for both ginned and seed cotton is:—

90 tolās	=	1 seer
40 seers	=	1 maund.

A Hardā maund of cotton thus contains 3,600 tolās, or 80 tolās more than a Seoni maund, and 400 tolās more than a Government maund. These differences give many opportunities to the astute tradesman, of which he is not slow to avail himself at the expense of the illiterate. In the town of Hoshangābād the Government seer and maund have excluded all other weights, but the Baniās purchase in the District by the *pakkā* seer of 95 tolās. Silver is always sold by the tolā, at a rupee's weight to the tolā; but the weights for gold are very involved, varying from tahsīl to tahsīl. The scale is:—

8 rattīs	=	1 māsha
12 māshas	=	1 tolā or rupee's weight;

but the gold tolā is equal to a rupee's weight plus $2\frac{1}{2}$ rattīs in Hoshangābād and Sohāgpur, plus 5 rattīs in Seoni, and plus 7 rattīs in Hardā. The standard square measure for land is the *māni*, which means the area of land in which a *kachchā māni* of wheat would be sown; this is about 4 acres

in Sohāgpur, where a larger proportion of seed is sown, and 5 acres elsewhere. A *pakkā māni* of land is, of course, double this. A *hal* of land, or the land worked by a plough of four bullocks, is also a familiar expression; strictly speaking, it is equivalent to 5 *kachchā mānis* and is usually about 25 acres, though in Hardā, where the cattle are bigger and stronger, as much as 30 acres are served by one plough. Another square measure, which is used with reference to chain measurement rather than cultivation, is :—

20 <i>biswānsis</i>	=	1 <i>biswā</i> .
20 <i>biswās</i>	=	1 <i>bigha</i> .

A *bigha* is equivalent to an English acre. The linear measures are the *hāth*, or cubit, and the *kadam*, or pace which equals 2 *hāths*, and is rather more than a yard. English linear measures are used in towns, and cloth is measured by the yard; but in village bazars the standard cloth measure is the *kānθi* or arm's length; $5\frac{1}{2}$ *hāths* make 3 *kānthis*, so that a *kānθi* is practically the same as a yard. Distances in the valley are generally judged by the *kos*, which is properly about 2 miles. The Gonds of the hills, however, speak of a *dhāp*, an elastic term applicable to almost any distance. The expression *kos*, while frequently used by them, is unfamiliar, and in their mouths generally implies about double the distance that it does in the valley. This difference, though fairly representing, no doubt, the Gond's superior power of pedestrianism, is sometimes a snare to the unwary traveller.

156. Weekly or bi-weekly markets are held at 23 villages in the Hoshangābād tahsil, at 24 in the Markets and Fairs. Sohāgpur tahsil, at 19 in the Hardā tahsil and at 7 in the Seoni tahsil. At most of these, only food and clothing, earthen and brass ware, and other articles of ordinary necessity are sold. Exports, such as grain, timber and so on, are usually purchased by agents and despatched direct from railway stations without passing through the hands of a middleman. There are six cattle registration markets, namely, at Itārsi and Bābai in the Hoshangābād tahsil, at Bankherī,

Bienville, Collo. D'Orby.
MAHADEO FAIR. PRIESTS HARANGUING THE PEOPLE.



Sāndia and Sobhāpur in the Sohāgpur tahsil, and at Rahatgaon in the Hardā tahsil. An octroi tax is levied in all municipal towns, and market dues are taken in the Notified Area of Itārsi, and at 10 villages, namely, at Bābai, Dolaria, and Tigaria in the Hoshangābād tahsil, at Bankherī, Khāparkherā, Junehtā, Sāndia and Sobhāpur in the Sohāgpur tahsil, at Shohpur in the Seoni tahsil, and at Timarnī in the Hardā tahsil. All the villages at which bazars of any importance are held, are described in the Appendix, to which reference can be made for further details. The fairs held in this District are strictly religious gatherings, and, with the possible exception of Bāndarābhān, have no commercial significance. Such shops as are opened at them are usually only intended to provide food for the pilgrims. The most important fairs are held at Bāndarābhān in the Hoshangābād tahsil, at Mahādeo, Mācha and Pāmli in the Sohāgpur tahsil, at Bhameri Deo in the Seoni tahsil, and at Handia, Gondāgaon and Sodhalpur in the Hardā tahsil. Further particulars will be found in the notice of those places in the Appendix.

TRADE.

157. The oldest and most important trade of the District is the export of wheat. Even in Akbar's

Trade in former years.

time, according to the *Ain-i-Akbarī*, the wheat of the Upper Nerbudda Valley supplied Gujarāt and the Deccan; and in 1834 it was re-

corded¹ that Seoni was the centre of a large export trade in wheat to Mhow, Asīrgarh, Burhānpur, and Saugor. In 1862, a new market for Hoshangābād wheat was found in Berār, where the American War of Secession had diverted so large an area to cotton that the production of food stuffs was insufficient for the needs of the population. About the same time the increase of opium growing in Mālwā had

caused a similar situation there. In addition, the growing prosperity of the inhabitants of Nimār and Mālwā had created a demand for wheat, which could not be satisfied locally. Thus, during the ten years prior to the opening of the railway, the wheat export trade of Hoshangābād was in a very flourishing condition. Mr. Elliott, by comparing the average production with the average local consumption, actually estimated the export at $10\frac{1}{2}$ lakhs of maunds. Figures so deduced, however, are likely to be unreliable; and in view of the fact that for the first 5 years after the railway was opened, the annual average for all grains together exported by rail was less than $9\frac{1}{2}$ lakhs of maunds, this estimate is probably exaggerated. There was also a considerable export of oilseeds to Bombay, while the American War temporarily increased the production and export of cotton. At this time Hardā was the headquarters of the wheat export trade; for the upper valley had not recovered from the heavy duty which the Marāthā Government of Hardā had formerly levied on grain imported from Hoshangābād. Seoni had also an active grain market, but its merchants were chiefly engaged in the cotton trade; and all the cotton exported to Bombay from Bhopāl and Narsinghpur, as well as from the Hoshangābād District, passed through their hands. Among imports, English piece-goods brought from Bombay were valued in the trade statistics of the time at about Rs. $2\frac{1}{2}$ lakhs, while the country cloth imported from Narsinghpur to supplement the local production was estimated by Mr. Elliott at about $5\frac{1}{2}$ thousand maunds in weight and Rs. 9 lakhs in value. Salt was imported from Mārwār, some 40,000 maunds a year crossing the line, of which about half was probably consumed in the District. Most of the sugar used came from Mirzāpur with a little from Bombay, and *gur* was imported from Betūl. Cocoanuts and spices were brought from Bombay. Iron was still imported from Tendūkherā in the Narsinghpur District, but the merits of English iron from Bombay were beginning to be recognised. It will thus be seen that the

direction of the District trade was principally towards Bombay, and the approach of the open railway from the west was every year increasing that tendency. An interesting indication of the direction of trade is to be found in the fact that currency notes of the Calcutta Circle, which were then issued in the District, never took firm root in the mercantile system.

158. With the opening of the railway in 1870 began a new era in the history of Hoshangābād trade. The whole District was now in direct and easy communication with

Opening of the railway.

Bombay. Instead of the local traffic with Central India and Berār, the wheat markets of Europe became accessible. The export of oilseeds to Bombay was immensely facilitated. Imports correspondingly increased, and English piece-goods, metals, salt, sugar and kerosine oil were largely imported, indicating an improvement in the general standard of living. The Indian Midland Railway, again, which was completed in 1882, opened a new line of communication with Upper India. The following statistics, which are taken from the Settlement Report of 1891-96, show the annual average rail-borne exports and imports in quinquennial periods from 1872 to 1891 ; the figures represent thousands of maunds :—

EXPORTS.

Period.	Wheat.	Other grains.	Linseed.	Til seed.	Cotton.	Other articles.	Total.
1872-76	..	937	15	61	20	291	1,324
1877-81	1,603	365	40	126	54	199	2,387
1882-86	3,326	144	51	108	8	286	3,923
1887-91	2,799	301	26	165	23	293	3,607

IMPORTS.

Period.	English piece-goods.	Indian piece-goods.	Metal.	Salt.	Sugar.	Kerosine Oil.	Tobacco.	Other articles.	Total.
1872-76	16	12	9	44	58	..	9	204	342
1877-81	29	5	26	125	97	..	24	274	580
1882-86	20	6	28	141	112	14	17	501	839
1887-91	20	4	24	142	106	27	18	466	807

In estimating the value of these figures, it must be remembered that the railway passing through this District serves a considerable area of Betūl, Chhindwāra, Bhopāl and Indore, and that the exports and imports of these territories are consequently included in the rail-borne traffic of Hoshangābād. On the other hand, the opening of the Indian Midland Railway in 1882 diverted a good deal of the traffic of the Central Indian States, so that the proportional increase in the exports and imports of Hoshangābād from 1882 to 1891 was even larger than the figures represent. The increase in trade during this period was clearly enormous. Exports trebled, and imports more than doubled. Wheat was not registered separately until 1877 ; during the next fifteen years it formed about four-fifths of the whole exports, and was practically all consigned to Bombay. The amount exported varies from year to year with the seasons ; the rust of 1877-78 resulted in the minimum of 3·17 lakhs of maunds, while the splendid crop of 1881 gave the record export of 41·84 lakhs of maunds. There was a substantial decrease from 1889 to 1891 owing to the continuous bad seasons. The exports of the risky linseed crop vary greatly from a minimum of 261 maunds in 1872 to a maximum of 96,000 maunds in 1884. There was a notable increase in the export of til seed, which is cheap to cultivate and with good prices is a most remunerative crop ; the year 1891 pro-

duced the record of 2·91 lakhs of maunds exported. Among imports the substitution of English piece-goods for the native cloth of Narsinghpur was one of the most noticeable results of railway communication with Bombay. English iron, also, now fairly ousted the Tendukherā ore from the market, while kerosine oil obtained an ever-increasing popularity. The increase in salt imports was largely due, of course, to the abolition of the salt line in 1874 ; but, as in earlier days, probably not more than half the amount imported was actually consumed in the District. The sugar market, again, was now flooded by the products of Mauritius and the North-West Provinces, and the local cultivation of sugarcane contracted almost to vanishing point.

159. No figures are available for the years 1892 to

*Trade in recent
years.*

1901, which witnessed the dislocation of trade by famine. But for the

five following years full details of the rail-borne trade will be found in the appended tables. It must, again, be remembered that the railway stations of Hoshangābād are centres of export and import for wide tracts outside the limits of the District. For instance, much of the forest and other produce entrained at Itārsi comes from Betūl, considerable quantities of grain and cotton from Bhopāl are sent by road to Piparia and other stations, while Hardā is the market for a large area of Indore. The bulk of the exports and imports here tabulated are, no doubt, the legitimate trade of the District proper. Still it would be unsafe to draw from these figures any such inference as a comparison between the population of the District and the value of its trade.

160. The export statistics are an interesting commentary on the effect of the famines. In 1902

Exports.

exports had sunk to 15 lakhs of maunds, which is very little more than the average of the years 1872-76 ; and though this figure was nearly doubled almost immediately, the 27½ lakhs of 1906 was still over 25 per

cent. less than the average for the decade ending 1891. Wheat, which is practically all sent to Bombay, is still the largest item, but has lost much of its old importance. In 1902, indeed, only 3·37 lakhs of maunds were exported ; but in 1903, although the area under wheat was less by nearly one-third, the excellence of the crop more than compensated, and exports were quadrupled. The figures of that year, however, were not maintained, and the average for the five years from 1902 to 1906 was only 39 per cent. of the total exports, which compares unfavourably with the 81 per cent. of the decade ending 1891. On the other hand, other food-grains have held their own, while cotton and oilseeds show a very marked increase. Reference to the agricultural statistics will show how this corresponds with the spread of *kharif* cultivation at the expense of *rabi*. Inferior food-grains are exported to Nimār, Khāndesh and Berār for local consumption ; and their prominence is an unmistakable sign of poverty and deteriorated agriculture. Oilseeds and cotton, however, are exceedingly profitable crops, and the increase in their export merely represents a new departure in agriculture, created by a new demand. Next in importance to agricultural produce are timber and firewood. With the systematic working of the Government reserves, the export of forest produce is of ever-increasing volume and value, and in 1906 actually challenged the supremacy of wheat. Teak poles and scantlings, fuel and bamboos, are the chief articles of export, and are sent to Berār, Khāndesh, Nimār and Indore. Of the minor products myrabolans, the fruit of the *harrā* tree (*Terminalia Chebula*), are the most important ; considerable quantities are brought from the sandstone hills of Betūl and Pachmarhī, and consigned to Bombay for export to Europe. Lac is sent to Mirzāpur, and mahuā flowers to Hyderābād, Indore, Cawnpore, Berār and Gujarāt. Provisions take next place to forest produce, and the quantity exported more than doubled between 1904 and 1906. Ghī is the chief item, and a certain amount of Betūl gur

EXPORTS.**FIGURES REPRESENT THOUSANDS.**

Names of articles.	1902		1903		1904		1905		1906			
	Quantity		Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity		
	Mounds	Rupees	Mounds	Rupees	Mounds	Rupees	Mounds	Rupees	Mounds	Rupees		
1. Wheat ..	..	..	337	9,58	1,312	34,44	1,021	18,72	1,265	37,15	751	25,81
2. Other grains and pulses ..	139	3,31	285	6,29	140	3,14	202	4,95	306	9,66		
3. Oilseeds ..	322	16,35	387	13,29	251	7,19	379	18,59	373	14,11		
4. Cotton..	..	..	44	6,76	112	19,43	83	17,99	153	26,53	136	25,81
5. Timber and firewood ..	314	6,88	281	8,31	408	11,70	526	14,99	735	25,81		
6. Myrabolans ..	..	..	77	97	37	49	86	1,27	76	1,18	33	39
7. Lac ..	..	..	5	1,26	6	1,74	6	2,31	10	3,52	7	2,82
8. Provisions ..	..	..	88	13,09	73	11,10	74	13,74	114	16,99	189	25,35
9. Hemp ..	..	..	11	59	45	2,45	21	1,14	25	1,32	28	1,51
10. Other articles value known ..	171	7,99	130	7,67	136	9,68	177	13,83	195	20,59		
Total ..	..	66,78	2,668	1,05,21	2,226	86,83	2,927	1,34,05	2,753	1,51,86		

IMPORTS.**FIGURES REPRESENT THOUSANDS.**

Names of articles.	1902		1903		1904		1905		1906	
	Quantity Maunds 000	Value Rupees 000	Quantity Maunds 000	Value Rupees 000	Quantity Maunds 000	Value Rupees 000	Quantity Maunds 000	Value Rupees 000	Quantity Maunds 000	Value Rupees 000
			Quantity Maunds 000	Value Rupees 000	Quantity Maunds 000	Value Rupees 000	Quantity Maunds 000	Value Rupees 000	Quantity Maunds 000	Value Rupees 000
1. Rice ..	108	3,66	54	1,82	94	3,59	99	2,66	66	2,82
2. Other grains and pulses ..	197	4,60	49	1,05	173	3,60	150	3,21	111	3,28
3. Salt ..	109	4,10	152	5,04	146	4,73	142	4,00	164	4,31
4. Sugar ..	118	7,89	145	9,56	137	12,44	163	13,11	170	12,49
5. Piece-goods ..	28	15,40	37	21,46	38	21,78	36	20,32	41	23,56
6. Provisions ..	36	3,57	42	3,61	47	6,06	49	5,70	48	4,84
7. Kerosine oil ..	30	1,87	37	1,72	30	1,82	39	1,78	44	2,02
8. Metals..	12	1,34	33	3,01	31	4,54	48	6,38	42	6,08
9. Tobacco ..	17	1,24	12	66	12	1,81	16	1,68	24	2,32
10. Spices..	10	1,08	9	1,20	9	1,27	11	1,52	11	1,55
11. Dyes and tans ..	7	1,35	6	1,99	5	1,84	6	1,47	9	2,30
12. Other articles value known.	149	8,77	238	16,36	221	19,64	294	25,95	324	29,92
Total ..	831	54,46	814	68,06	972	82,42	1,058	88,87	10,54	95,49

is also included. Seoni exports the *pipar* (*Piper longum*) to Calcutta to be made into pickles, and the betel of Sohāgpur and Seoni goes to the surrounding Districts and to Bhopāl. In addition, a few manufactured articles have a certain local reputation in neighbouring Districts and States, such as the brass work of Hardā and Handia, the dyed goods and pottery of Sohāgpur, the betel-nut crackers of Timarnī, the bamboo walking sticks and combs and the nut-graters of Hoshangābād. Some stone from the Hoshangābād and Tiloksendur quarries is also exported, while a certain amount of hemp is brought from Bhopāl and Indore to Piparia, Seoni and Hardā for transmission to Bombay.

161. As regards bulk, imports were not affected by the famines for food took the place of luxuries. Thus the weight of goods

Imports.

imported in 1902 is almost identical with the average weight of imports during the decade 1882-91. It is a sign of improved prosperity that the imports of 1906 exceeded those of 1902 by only 25 per cent. in weight, but by 80 per cent. in value. Rice and food-grains, however, are still among the chief imports. Rice comes from Gondia and Jubbulpore; the demand for it is decreasing, but as the quantity grown within the District is every year diminishing, it is likely to hold its own as an import. Juār is brought from Indore and maize from Cawnpore, Agra and Gwalior. Juār can only claim to be a staple food in times of stress, and the quantity imported, while depending to some extent on the amount produced locally, is a fair gauge of the material condition of the District. Thus the year 1903 was exceptional; for, as may be seen from the agricultural statistics, the area then under juār was, for a special reason, about three times the present normal figure. Otherwise, it is satisfactory to notice that the import of cheap grains has steadily and continuously diminished since 1902. The salt consumed here generally comes from Khārāghoda on the Rann of Cutch. The sugar imported is

partly from Mauritius and partly Mirzāpur from Benāres and Buxar, which is now said to be preferred, while *gur*, or unrefined sugar, is brought from the North-West Provinces, and also, to some extent, from Betūl and Berār. The salt and sugar imported amount to about twice the provincial averages of consumption per head of population; but large quantities are re-exported to Betūl and Central India. The reductions of the salt tax in 1903 and 1905 are, of course, responsible for an increased consumption of salt. The rise in sugar imports indicates chiefly an improved prosperity, but is also partly due to the recent introduction of United Provinces *gur* into Betūl, where it is underselling locally grown sugar. Piece-goods imported are mostly of European manufacture, the proportional value in 1906 being 14 lakhs worth of European goods to 5 lakhs worth of Indian-European piece-goods are brought from Bombay, while native cloths come from Thāna, Jubbulpore, Ludhiāna and Ahmadābād. Silk-bordered cloth is obtained from Bur-hānpur, carpets and turbans are imported from Agra and Delhi, and tasar silk for head cloths from Bhāgalpur. Imports of provisions are considerable, but can compare neither in weight nor in value with the exports. The use of kerosine oil has become more and more general, until it has practically ceased to be a luxury, and the familiar tin is almost recognised as a standard measure. Among metals, English iron and iron work from Bombay are the most important. Brass sheets are also brought from Bombay to be made into vessels locally, while brass vessels are imported from Poona, Bombay, Benāres and Mirzāpur. Mirzāpur also sends vessels of *bharat*, an amalgam of brass and other metals, and copperware comes from Poona and Cawnpore. Of minor articles, raw tobacco is brought from Bachchhor, Mirzāpur and Tirhut, country cigarettes from Poona and Nāgpur, and spices from Bombay. A certain amount of foreign dye is imported by the Chhipas of Sohāgpur and Hardā.

162. The excess value of exports over imports was only Rs. 12 lakhs in 1902 ; and though in 1903, thanks to the fine harvest of that year, this figure rose to Rs. 37 lakhs, it fell again to Rs. 4 lakhs in 1904. The years 1905 and 1906, however, show an excess of Rs. 45 lakhs and Rs. 56 lakhs respectively. This very marked improvement is due partly to the rise in the price of wheat, but still more to the increased export of forest produce, cotton, and provisions. The total revenue raised from the District has at the same time advanced from Rs. $8\frac{1}{2}$ lakhs to Rs. 11 lakhs in 1905 and 1906. As, however, it is impossible to state the precise amount of trade, which, though entered in these statistics, only passes through the District, no exact comparison can be drawn between revenue and the wealth indicated by the excess of exports over imports. But at least it can be said that the proportion of exports properly belonging to other Districts is probably no larger than, if as large as, the proportion of imports re-exported.

163. A noticeable result of the opening of the railway was the decentralisation of trade. There are no less than 25 railway stations in the District, and it is only natural that produce intended for export should be despatched from the nearest. Grain-dealers and timber merchants have established agencies at every convenient station, and so save the cost of carting to the large market towns. Of course certain stations derive special advantages from their peculiar position, the existence of feeder roads, and so on. Thus Itārsī is the natural dépôt for the bulk of the trade of Betūl; Hardā and Seoni are the centres of systems of roads radiating in every direction; Piparia and Semri profit by the octroi dues at Sohāgpur, which tend to direct all through trade to less troublesome stations; Piparia, again, is connected by metalled roads with Bhopāl, Chhindwāra, the Pachmarī hills, and Sobhāpur; Bankherī, Piparia,

Sohāgpur, Semri, Bāgra, and Timarni are the natural depôts for timber from the jungles to the south ; Hardā receives through Handia the trade of Holkar's State ; and so on. Similarly with imports, Itārsi feeds Betūl ; Hardā, besides its own considerable consumption, is the distributing centre for a large tahsil, and is also in direct communication with Indore ; Piparia sends considerable supplies to Pachmarhī and Bhopāl, to Sobhāpur and the important villages in the Sohāgpur tahsil. The statistics for 1906 show the overwhelming importance of Itārsi, Hardā and Piparia, alike in exports and imports. Itārsi exported 7 lakhs of maunds and imported $2\frac{3}{4}$ lakhs, or 26 per cent. alike of the exports and imports of the District. The exports of Hardā were $5\frac{1}{2}$ lakhs or 20 per cent. of the District total, and the imports 3 lakhs or 28 per cent. of the total imports. Piparia, again, exported $3\frac{1}{2}$ lakhs and imported $1\frac{1}{2}$ lakhs, being 13 and 14 per cent. respectively of the exports and imports of the District.

164. The grain export trade is controlled by Messrs.

Castes engaged in trade.

Ralli Brothers, who have agencies at the principal railway stations. A few Jains,

Baniās, Cutchis, Mārwāris and Bhātias also export grain wholesale, but on a smaller scale. The timber trade is mostly in the hands of Punjābis. Myrabolans are exported by Bohrās, and also by the jāgīrdārs who own large forests, while the chief mahuā merchant is a Kalār of Itārsi. Cutchis are the principal wholesale importers of cloth, spices and other provisions, which are distributed in the interior by itinerant Baniās.

COMMUNICATIONS.

165. At the time of the thirty years' settlement there was no deficiency more felt in the District than the want of roads. Although British rule had been established for forty-five years, no new works had been undertaken and

Communications in former years.

but little effort had been made to improve the roads already existing. Of these, by far the most important was the old Great Eastern Road from Bombay to Jubbulpore, along which nearly the whole traffic of the District was carried. Except for a détour from Dolaria to Bābai through Hoshangābād, the course of this road is approximately that of the present railway. But unmetalled and unembanked, with only the smaller nullahs bridged, it was then but little better than a fair weather track. The old Imperial road from Agra to Burhānpur and the Deccan, which ran through Handia, Bichholā and Chārwa, had already disappeared, and its course could only be traced by the ruins of temples and other buildings. The road from Handia to Hardā, which dates from the Marāthā occupation, was an unaligned track ; the important trade route from Itārsi to Betūl had been neglected, except for a few professional inspections ; and the only feeders to the Bombay road were tracks to Sobhāpur and Chārwa. The reasons for this neglect were the difficulties of road-making in the deep soft soil, and an inadequate supply of funds ; and its result was that, beyond a little boat traffic on the Nerbudda, Hoshangābād was cut off from the outer world during the rains. It is thus not surprising to find that the active brain of Major Ouseley conceived an elaborate scheme for opening up the District by improving the navigation of the Nerbudda. This scheme was first propounded in 1833, but after careful survey was rejected by the Supreme Government as impracticable. Communications thus remained as they were until the opening of the railway, when the Nerbudda lost its value as a water-way from east to west.

166. The Great Indian Peninsula Railway from Bombay to Jubbulpore was completed in 1870. It runs through the whole length of the District from east to west, about midway

between the Nerbudda and the hills, so that there is hardly a village of any importance situated more than a dozen miles from a station. From Khirkīān on the west to Bankherī on the east is a distance of 120 miles, and between these two there are no less than 21 other stations, at average intervals of about 5 miles. The railway generally follows the line of the old Bombay road, but diverges from it near Dolaria, passing 12 miles south of Hoshangābād through Itārsi, and then trending still further south to cross the Tawā at the opening of the gorge through which that river issues from the Sātpurās. The Tawā viaduct is a fine piece of work, and there are also bridges of considerable size over the Ganjāl, Ajnāl and Dudhī rivers. There is only one short tunnel, by which the line is carried through a spur of the Sātpurās on the east side of the Tawā viaduct. Railway communications were still further improved in 1882 by the opening of a line from Itārsi to the north, passing through Hoshangābād, and bringing the District into close touch with Upper India. This line was originally the Bhopāl State Railway, afterwards the Indian Midland Railway, and it is now the Midland section of the Great Indian Peninsular Railway. Only twelve miles of it are in this District, and there is one wayside station between Itārsi and Hoshangābād. The viaduct by which the Nerbudda is crossed is the most important engineering work in the District. Itārsi thus occupies a prominent position in the railway system of India, and its importance is likely to be enhanced by a projected line southwards through Betūl to Nāgpur, which will form a direct line of communication between Hindustān and the Deccan. Other lines suggested, but not surveyed, are from Itārsi to Ellichpur and from Hardā to Handia. The railway authorities are also considering the possibility of shortening the distance between Bhusāwal and Bhopāl by constructing a loop, which will probably leave the main line at Bir in Nimār.

167. The old Bombay road has ceased to be of much importance except from Semrī to Hoshangābād, and again from Hoshangābād to Roads.

Dolaria, where it serves as a useful feeder to both railway systems. From Hoshangābād to Jasalpur it is metalled, and as far as Hatwāns it is under the management of the Public Works Department. Its remaining sections are maintained by the District Council. All the other important roads of the District are feeders to the railway, which, though numerous, are seldom metalled or passable in the rains. The Public Works Department is altogether responsible for 176 miles of road, including station roads, of which 126 miles are metalled. The construction of the metalled roads cost 10 lakhs and of the unmetalled roads 1½ lakhs, while their annual upkeep amounts to Rs. 44,000 and Rs. 9,000 respectively. The District Council manages 128 miles of unmetalled road, which cost Rs. 4,400 to maintain. In addition there are a number of village roads annually repaired by mālguzārs. These feeders will now be described tahsīl by tahsīl, beginning from the east.

168. In the Sohāgpur tahsil the roads tend to converge

on the three important trade centres,
Sohāgpur tahsīl.

Bankherī, Piparia and Semrī, and on the tahsīl headquarters, Sohāgpur, all of which lie on the old Bombay road. From Bankherī there are village roads running north to Umardhā and south to Fatehpur, while, as the distance to the neighbouring railway stations, Piparia and Bābai, is considerable, the old Bombay road is also of some importance as a trade route. The road to Fatehpur is all that now remains of the old main road from Bankherī to Pachmarī, which was abandoned on the completion of the present road in 1879. Piparia occupies the most fortunate position, as regards roads, in the tahsīl. The road north to Sāndia Ghāt on the Nerbudda, which is 12 miles long and was metalled in 1897, connects the cotton and grain fields of eastern Bhopāl with the railway. This is supplemented by the road 6 miles long,

which was constructed in 1897, north-west to the big market of Sobhāpur, whence village roads run northwards to Mācha and to Bhatgaon and Madanpur on the Nerbudda. To the south is the metalled road to Pachmarī, 32 miles in length, which was constructed in 1877-79; and at Matkulī, 14 miles from Piparia, the high road to Chhindwāra diverges from it to the east. There is also an unmetalled road, maintained by the Public Works Department, running south-eastwards from Pachmarī through the Mahādeo hills to join the Chhindwāra road near Tāmia Ghāt. Sohāgpur is connected with Sobhāpur by a metalled road, 6 miles in length, and with the Borī forest reserves by a forest road which runs south through Bamorī, Khāpa and Chornā; there is also a village road to Chaurāhet. From Semri an unmetalled road, 8 miles long, in the charge of the District Council, runs northwards to Bhārkach in Bhopāl, while a track to the south joins the Borī-Sohāgpur road at Bamorī.

169. By far the most important road in the Hoshangābād tahsil is the high road from Itārsi to Badnūr, which carries practically the whole of the trade and commerce of the

Hoshangābād
tahsil.

Betūl District. It has already been shown how this important trade route was neglected in the early days of British rule. A substantial grant for its metalling and embankment was first allotted in 1864, and it is now maintained as a first-class road by the Public Works Department. It is 20 miles from Itārsi to Dhār on the Betūl border, and 35 miles from there to Badnūr; the road is also continued northwards to Hoshangābād, a distance of 11 miles. After the Betūl road, the most important road in this tahsil is the old Bombay road, which runs south-east and south-west from Hoshangābād, connecting the northern half of the tahsil with the District headquarters. There is also an unmetalled road from Hoshangābād to the large village of Raipur, on the river Tawā, which brings a certain amount of traffic from Chichli in Bhopāl and Sāngakherā Kalān. The principal

railway feeders are the metalled road, 7 miles long, from the important market of Bābai to Bāgra station, and the road from Dolaria village to the station of the same name. A number of fair-weather tracks lead from the surrounding villages to Itārsi.

170. In the Seoni tahsil, except for a short metalled road from Seoni town to Banāpurā station

Seoni tahsil.

and the old Bombay road, there are no roads maintained either by the Public Works Department or the District Council. There are, however, four village roads, running from the large market town of Seoni to the four corners of the tahsil; namely, north-east to Mardanpur in Bhopāl, south-east to Nandarwāra and Chandākhār, north-west to Shohpur and Nayāgaon, and south-west to Lokhartalai and Dheknā, on the Betūl border, connecting therewith the Hardā-Badnūr road.

171. Most of the roads of the Hardā tahsil radiate from

Hardā tahsil.

Hardā and Timarni, both of which lie on the old Bonhay road. The most

important is the metalled road from Hardā to Handia, 13 miles in length, which connects a considerable area of Indore with the railway. Next in importance is the District Council road from Betūl, which enters the District at Dheknā; it is 51 miles from Badnūr to Dheknā, and 16 miles from there to Sodhalpur, where the road forks, the main branch going north to Timarni, while a village road leads west to Hardā: from Sodhalpur it is 4 miles to Timarni and about 10 miles to Hardā. Another District Council road runs south from Sodhalpur to Rahatgaon, a distance of $5\frac{1}{2}$ miles, bringing Timarni into direct communication with the Rājaborāri forests, through which a forest road is maintained from Rahatgaon to Kaidā. Another road carrying a considerable amount of traffic is the metalled feeder, 5 miles long, running from Chārwa to Khirkīān station. In addition, there are a number of village roads leading from Hardā to various parts of the tahsil; namely, north-east to Chhipaner, south-

east to Rahatgaon, south to Magardhā, south-west to Sirāli in Makrai, and north-west to Joga. Another important fair-weather road runs north from Timarnī to Chhipāner on the Nerbudda.

172. In early times pack bullocks were largely employed for purposes of transport. In 1834¹ Seoni

Methods of trans-
port.

was said to be a great place of resort for

Banjārā bullock-men, who often arrived with a string of upwards of 500 head of cattle, and, after loading, departed for Mhow, Asīrgarh, Burhānpur and Saugor. At the time of the thirty years' settlement, exports to Mhow and Indore, which were roughly estimated at two-thirds of the whole exports of the District, were carried entirely on bullocks, while bullock carts were used for the trade with Burhānpur and Nimār. There was also a certain amount of small boat traffic on the Nerbudda, especially during the rains. With the opening of the railway, transport by boat practically disappeared; and as roads improved, the cart entirely displaced the pack bullock. There is hardly a place in the valley which an ordinary country cart cannot reach in the open season, and much of the forest also is now accessible. From the more impassable tracts, produce is brought in headloads. Camels are rarely employed in the District itself, but are used to bring the exports of Central India to the fords of the Nerbudda. The carts locally employed are of two kinds, the *chhakrā* and the *gāra*. The former is used for passengers; it has sitting-room for four, and is drawn by two bullocks. The *gāra* is the cart of commerce. The usual load is about 12 maunds, requiring two bullocks for draught; but occasionally four bullocks are yoked and the load is doubled.

¹ Asiatic Journal for 1834, page 63.

CHAPTER VI.

FORESTS AND MINERALS.

FORESTS.

173. The Government forests, with the exception of a few small and isolated blocks in the Hardā tahsīl, lie to the south of the Great Indian

Government forests.
Situation.

Peninsula Railway on the slopes and foot-hills of the Sātpurās. Stretching in one almost continuous belt, some 80 miles in length, from the Fatehpur hills to the borders of Makrai State, they occupy a total area of 946 square miles, or about one-quarter of the whole District. There are now five forest ranges, Borī, Sohāgpur, Hoshangābād, Seoni, and Rājaborāri. Formerly there was yet another range, that of Kālibhīt, in the extreme south-west of the District, bordering on the river Tāpti. But in 1904 this tract, covering an area of 288 squares miles, was transferred to the Nimār District and Forest Division.

174. The history of the Hoshangābād forests is interesting. The old Borī range, east of the

Management, past
and present.

Sonbhadrā, was the first forest in India to be systematically conserved. Confiscated in 1859 from Thākur Bhabūt Singh for his disloyalty in the Mutiny, it was brought under the management of the newly organised Forest Department in 1862. At that time the forest had suffered greatly from shifting cultivation, known in this part of India as *dhayā*,¹ which was the method of agriculture usually practised by the aboriginal tribes. Special measures for protection were taken in 1864, and in the following year the forest was notified as a reserve under the Act of 1865. Four years later

¹ A detailed account of *dhayā* cultivation will be found in Captain Forsyth's "The Highlands of Central India," Chapter III.

a resident forest officer was placed in charge with headquarters at Harāpāla. Boundaries were demarcated, and at Harāpāla a small teak plantation was established. In 1878, in order that a larger teak-producing area might be included in the reserve, the new Borī forest, stretching from the Sonbhadrā to Kānkri, was added to the Borī range. Until 1889 practically no fellings were attempted. Since then annual coupes of mature teak and *tinsā* (*Ougenia dalbergioides*) have been made in defined areas, according to a systematic working plan. The forests of the other four ranges were first brought under Government supervision in 1862, when they were notified under the Waste Land rules. The cutting of certain reserved trees, teak, *sāj* (*Terminalia tomentosa*) *shisham* (*Dalbergia latifolia*) and *bīja* (*Pterocarpus Marsupium*) was prohibited; but subject to this provision free access was granted on payment of an annual commutation fee, and large areas were leased out in blocks. The need for closer control was soon apparent, and about 1868 certain forests were notified as reserved and brought under the Forest Department. The remainder, designated unreserved, were managed by the District authorities until 1878, when they too were made over to the Forest Department. Commutation, except for aboriginal hill tribes, was abolished, and the license system introduced. Forest produce was only permitted to be removed from defined areas and by fixed routes, and each removal was paid for separately. This continued until 1893, when working plans for these ranges also were prepared. The total area of A class reserves in 1905-06 was 740 square miles. Seven hundred square miles were fire-protected, of which 495 square miles were under A class protection at a cost of about Rs. 8 a square mile, while the cost for the remainder was about R. 1-3 a square mile.

175. The area covered by the Government forests is geologically part of the Gondwāna system.

**Character of
the forests.**

In the east of the District the formation is sandstone with occasional outcrops of

trap ; but westwards trap is the prevailing rock. The soil is generally good for forest growth. But an area in which the elevation ranges from 1200 to 4000 feet above the sea, naturally admits of wide variations. On the alluvial flats of the Borī river and on the trap formation of Rājaborāri, teak (*Tectona grandis*) predominates. On the middle and lower slopes of the hill belt there is good mixed forest, containing *sāj* (*Terminalia tomentosa*), teak, *tinsā* (*Ougeinia dalbergioides*), *tendū* (*Diospyros Melanoxyylon*), and other less valuable trees. Approaching the Nerbudda valley, where the land is suitable for field crops, the forest has usually suffered from shifting cultivation and unrestricted fellings, and wide stretches have been converted into grass land. Again, on the dry and rocky peaks and plateaus, the trees are stunted, and *salai* (*Boswellia serrata*) generally prevails. Bamboos are plentiful in every range, and the Borī valley produces probably the finest specimens of *Dendrocalamus strictus* found in the Provinces. There is an outcrop of *anjan* (*Hardwickia binata*) on the lower slopes of the Pachmarī hills, and considerable numbers of this species are also to be seen in the north-west of the Hardā tahsil. On the Pachmarī plateau and in parts of the south Denwā forests fairly good *sāl* (*Shorea robusta*) is found, but usually in places too inaccessible to repay extraction. This is probably the most westerly point in India at which *sāl* grows.

176. Teak is the most valuable timber wood. The Borī teak is said to be only surpassed by that Major products. of the Ahiri range in the Chānda District among the forests of the Central Provinces. Nearly half the Borī forest is capable of producing sound teak trees of 80 to 100 feet in height and 6 feet in girth, and trees 9 feet in girth, or even more, are found here. Teak wood is principally used for house-building and furniture of all descriptions. Next in importance are *sāj*, *bīja* and *tinsā*, from which agricultural implements are generally made. *Tinsā* is especially good for carts and ploughs, and has a considerable demand.

When these cannot be obtained, *tendū*, *ghiria* (*Chloroxylon Swietenia*), *dhaurā* (*Anogeissus latifolia*) and other inferior woods are cut for timber. *Sihāru* (*Nyctanthes Arbor-tristis*), *ber* (*Zizyphus nummularia*) and bamboos are used for fencing. Firewood is extracted in large quantities for the Great Indian Peninsula Railway and for export, as well as for ordinary local consumption. The best woods for fuel are considered to be *dhaurā*, *khair* (*Acacia Catechu*), *ber*, *kohā* (*Terminalia Arjuna*), *lendia* (*Lagerstræmia parviflora*) and *kakai* (*Flacourtiæ Ramontchi*). Charcoal burning is practically confined to mālguzāri forests. The extraction of major products is restricted to the annual coupes, which are sold by auction to the highest bidder. There are also fixed rates for purchases direct from the Forest Department. In 1905-06 the wood extracted was estimated at 450 thousand cubic feet of timber and 93 thousand cubic feet of fuel, giving a revenue of Rs. 31,000 and Rs. 10,000 respectively. The most important market for timber and fuel is Itārsi, but there is also a considerable trade at Rahatgaon and Sohāgpur. Exports are made from most of the stations on the Great Indian Peninsula Railway, where regular depôts are maintained. The chief exports are teak poles and scantlings and bamboos, which are sent to Khāndesh, Berār, Indore, Khandwā and Burhānpur.

177. With the exception of bamboos, which are cut by minor products. special license at varying rates, averaging about R. 1 per 100, the right to collect minor products is leased out to contractors. In 1905-06 it was estimated that about 16 lakhs of bamboos, weighing 4,000 tons and worth about Rs. 16,000, were removed. Other minor products in the same year together realised some Rs. 10,000. Among the more important are the edible fruits, on which the aboriginal inhabitants of the jungle largely depend for sustenance, including *mahuā* (*Bassia latifolia*), *achär* (*Buchanania latifolia*), mango (*Mangifera indica*), *tendū*, *ber*, *jāmun* (*Eugenia Jambolana*) and others. Babair grass,

(*Pollinia eriopoda*), which is plentiful in the Sohāgpur range, was formerly exported to Poona and Cawnpore for the manufacture of paper. It is now made into ropes locally. *Palāś* roots (*Butea frondosa*) and *māhul* (*Bauhinia Vahlii*) and *anjan* bark are also used for rope-making. *Dūb* (*Cynodon Dactylon*), *muchel* (*Iseilema Wightii*), *keil* (*Andropogon annulatus*) and *gunhāri* (*Anthistiria scandens*) are the best fodder grasses, and *sūkhal* (*Pollinia argentea*) and *sen* (*Ischænum laxum*), are used for thatching. Other forest products are lac, hides and horns, various minerals, honey, wax, and gum. A considerable revenue, too, is derived from various barks, leaves and fruits used for dyeing, the most important being *harrā* (*Terminalia Chebula*), which furnishes the myrabolans of commerce. Many of the common drugs of English pharmacy are products of these forests; among them may be mentioned "kino" which is the juice of the *bīja* tree, and *bel* fruit (*Ægle Marmelos*). There are many other trees possessing valuable medicinal properties, which are scarcely known except to the natives. The value of minor forest products is generally rising, and their development is claiming increased attention.

178. Until 1893 grazing in the forests was almost unrestricted, and in the year 1891-92.

Grazing.

130,000 animals entered the forest and the revenue realised from grazing dues was Rs. 30,000. But owing partly to restrictions, partly to the gradual contraction of the forest area, and partly to the years of scarcity, the number of animals grazed had sunk in 1903-04 to 70,000, giving a revenue of less than Rs. 14,000. However, the introduction of a differential system, giving specially favourable rates to agriculturists, has been accompanied by a very marked recovery. In fact, though there were only 786 square miles open to grazing in 1905-06, as against 1685 in 1891-92, over 110,000 animals entered the forest, and the dues paid amounted to more than Rs. 21,000. The effect of the introduction of working-plans is to close one-third of the

working circles ; for each coupe in a thirty years' rotation is closed for ten years after felling to assist the regeneration.

179. The annual forest income was Rs. 77,000 in 1881-82, Rs. 1,27,000 in 1891-92, and Statistics of revenue and forest staff. Rs. 90,000 in 1905-06. The great increase

in 1891-92 marks the commencement of systematic fellings in the Borī range ; and the subsequent decrease is due to the introduction of working-plans, which restricted fellings and reduced the working area. The expenditure rose from Rs. 32,000 in 1881-82 to Rs. 53,000 in 1891-92, when reserves and protected areas were created throughout the division. The transfer of the Kālibhīt range to Nimār has since reduced the expenditure by more than Rs. 2000. The staff now includes a Deputy Conservator of the Imperial Service, 5 Rangers, 3 Deputy Rangers, 9 Foresters, and 99 permanent and 15 temporary Forest Guards.

180. The jāgīrdāri and mālguzāri forests are considerable, covering 669 square miles, of which

Private forests. 432 square miles are actual tree-forest.

Thus, with the Pachmarī sanitarium forests, which are some 19 square miles in extent, the total area under forest of all descriptions is 1634 square miles, or about 40 per cent. of the total area of the District. In disforested villages too, especially in the sandy soil of the Sohāgpur tahsil, mahuā trees (*Bassia latifolia*) are very plentiful, adding greatly to the wealth and beauty of the District. The jāgīrdāri forests lie in the south-east corner of the District and are similar in character to the Sohāgpur range. There are considerable stretches of mālguzāri forests in the north-west of the Hardā tahsil, while the remainder, with a few isolated exceptions, form a fringe between the Government reserves and the cultivated plain. The ground occupied by them is usually flat, rising now and again into rough and stony hills. Private forests have generally suffered heavily from mismanagement and negligence. Mots

of the good timber trees have been cut out, and inferior species and fruit-bearing trees alone remain. Heavy grazing and fire have to a great extent prevented regeneration, and these forests are usually open with little or no undergrowth. Destructive pollarding is common, and dead and more or less unsound trees are everywhere seen. The area of good tree-forest is in this way being reduced every year, and protective measures are often found necessary. In 1907 there were 8 villages in which the forests had been notified as requiring special protection, and closed for five years. In some of the more important private forests there is a growing need for the introduction of some sort of a working plan, which would check this wanton destruction of capital. Income from forests has always been lightly assessed and revenue demands afford no excuse for indiscriminate fellings.

MINERALS.¹

181. A considerable number of minerals are to be found in the District, but though several

Mines.

attempts at mining have been made, none

have yet proved successful. Gold is said to have been discovered once at Bāgdeo on the Itārsi-Betūl road. Argentiferous galena occurs at Jogā, and the remains of an old mine, known as Chāndi Khadān, are still to be seen there, consisting of two parallel lines of excavation in a band of transition limestone. The proportion of silver found is 21 ounces to the ton of lead, which hardly entitles the mines to be called silver rather than lead mines. There are also said to be traces of silver near Handia. The only modern attempt at silver-mining in the District was made at Bāgra in 1903-04, but proved unsuccessful. At Bāgra, too, a lead mine was opened some years ago, but gave no adequate return. Iron ore is to be found in the

¹ Information for this section has been supplied by Mr. H. Walker of the Geological Survey of India.

hematite-bearing breccias of the Bijāwar rocks. Small extractions have been made in the range which separates the Denwā valley from the plain, in the Mālni forest to the south of the Denwā, and in the Bairi hills of the Hardā tahsil, but the pits were of insignificant extent and often not more than 10 feet deep. Coal, however, is probably the most important mineral in the District. The propinquity of the profitable coal seams of Mohpāni and the occurrence within the District of the younger beds of the coal-bearing (Gondwāna) series have long suggested to prospectors the possibility of reaching satisfactory coal measures by boring. In 1833 Major Ouseley, who was then Deputy Commissioner, submitted samples from the Fatehpur and Zamāni hills, which he described as "coal of the finest kind," and one of his chief arguments in favour of the Nerbudda navigation scheme was the necessity of making a waterway to export this valuable mineral. In 1847 a coal mine was started in Makrai. None of these earlier attempts proved profitable undertakings. In more recent times several borings were made, but none were successful in reaching coal; some did not go below the Nerbudda alluvium, and others did not penetrate beneath the younger strata in which coal is not found. Latterly, however, prospectors have found reason to believe that the Mohpāni coal-seams extend westwards along the Sātpurās, and occur sufficiently near the surface to repay extraction. Mining operations on an extensive scale are now being commenced at Bāgra, and it is hoped that the District may be benefited by a new and profitable industry.

182. All the rocks which occur within the District,
 Quarries. with the exception of the clays and shale,
 are more or less useful for building pur-
 poses. The most important quarry is the Adamgarh quarry
 in the sandstone "Black Rocks," one mile to the south
 of Hoshangābād. The thin-bedded strata give excellent
 flagstones, and the less thinly bedded are easily cut into
 small blocks for building. Good sandstone for building

purposes is also quarried in the hills round Pachmarī, at Tiloksendur in the Hoshangābād tahsil, and at Dhāndiwāra in the Seoni tahsil. The finer and more compact beds of the Deccan trap which occurs in the west of the District, also give good building stone. An unlimited supply of road metal, both *gitti* and *muram*, can be obtained throughout the District, and the Public Works Department maintains quarries on all the principal roads. Stone for ballast is also taken from the Ganjāl and Moran rivers at Chhidgaon station by the Great Indian Peninsula Railway Company. Several pits in the Bijāwar limestones are worked, and in some cases a superior quality of lime is obtained. Generally, however, the siliceous nature of the beds is adverse to burning. *Kankar*, which is very abundant in the alluvium of the Nerbudda valley, is the principal source of lime. Good clay for pottery is found round Sohāgpur, where earthen vessels of some reputation are made.

CHAPTER VII.

FAMINE.

183. In the period which preceded the thirty years' settlement, five years of scarcity have been recorded. Of these, only two can be attributed, wholly or in part, to natural causes. War and political disturbances appear to have been alone responsible for the distress of 1771 and 1783. In 1803 the inroads of Sindhia's armies were followed by a failure of rain. Severe famine ensued, and prices rose to $3\frac{1}{2}$ seers a rupee for wheat, and $2\frac{1}{2}$ seers a rupee for rice. The Pindāri raids of 1809 caused another year of distress. The scarcity of 1832, which is still spoken of as "the famine year", spread over a wide area, and was due to no external circumstance. The spring harvest failed from rust. Export was prohibited, but the price of wheat, at a time when the normal rate was 40 seers a rupee or even more, rose to 17 seers a rupee. To give relief, the second instalment of revenue was entirely remitted.

184. The thirty years' settlement was completed in 1865, and, like the settlement of 1891-96 The year 1868-69. was soon tested by a bad year. In 1868, which is generally known as the year of the Bundelkhand famine, only 27 inches of rain were recorded. But thanks to the black soil's retentiveness of moisture, and the late September rains, which allowed the seed to be sown, a fair crop of wheat was raised. Other crops suffered very considerably, and prices generally ran high. No relief works were, however, necessary. Immigrants from Mārwār, Rewah and Bundelkhand were numerous, but the railway construction then in progress relieved the pressure.

185. The rainfall of 1877 was not only less than the average, but was also badly distributed.

The year 1877-78.

But for a good fall in October the autumn crops would have completely failed. The spring harvest promised well for a time; but heavy rain fell in December and January, and the wheat crop was attacked by rust. Wheat went up to 12 seers per rupee, and there was much distress among the poor. Some too of the more well-to-do proprietors and tenants trace their indebtednesses to the losses of this year.

186. The recent cycle of bad years, which has left such a mark upon the District, began in 1893-94,

The recent cycle of bad years. 1893-94.

while the settlement of 1891-96 was still in progress. In 1893 there were five inches

of rain in November, and throughout January, February and March of the following year the weather continued damp and cloudy. The wheat crop in the greater part of the District was seriously damaged. Other crops also suffered, the combined harvest being 33 per cent. below the average.¹ Prices, however, were scarcely affected, wheat being at 15 seers per rupee in 1894, which is not higher than the normal rate for this period.

187. In 1894-95 the rainfall was excessive, and worse distributed. In October there was an

The year 1894-1895.

almost continuous fall, nearly 9 inches

being recorded. The seed rotted, and in many cases resowing became necessary. Damp and cloudy weather throughout the cold months followed, and the growing crops were attacked by rust. The Hardā tahsil was scarcely affected; in Seoni the damage was not serious; but further east the crops became worse and worse. The combined harvest amounted to only half an average crop. It is good testimony to the productiveness of the District that it still stood the strain, and the price of wheat only rose to 14 seers per rupee in

¹ The figures for the outturn in this and the following years are taken from Mr. Low's report on the abatement proceedings of 1900-01.

1895. In the two eastern tahsils, however, relief works became necessary. [Road-works were taken in hand not only by the Public Works Department, but by the Deputy Commissioner, who in August 1895 was providing employment for as many as 12,700 labourers. The Government forests were also thrown open for the collection of edible products, dry wood and grass.] In addition to public effort, private charity in Hardā and Hoshangābād gave gratuitous relief to many indigent persons, but with results that were not, in the opinion of the Deputy Commissioner, wholly satisfactory. Large numbers of emaciated and starving persons were attracted thereby across the Bhopāl frontier in straits too desperate to be relieved. This influx from Bhopāl no doubt affected the death-rate, which in 1895 was 46 per mille, against a birth-rate of 34 per mille.

188. The year 1895-96 was marked by a general deficiency in the rainfall, and a failure of The year 1895-1896. the winter rains in particular. Both in the early and late monsoons the fall was some 4 inches below the average, while, with the exception of one shower in the early part of December, there was no rain in the cold weather. The autumn crops generally gave an average harvest ; and in the Hardā and Seoni tahsils, where the soil is rich and retentive of moisture, the spring crops were sufficient. But on the poorer land to the east, especially on the rising ground at the base of the Sātpurās, the spring harvest failed. The combined harvest was 65 per cent. of normal. The strain of the preceding bad years now began to tell, and the price of wheat rose in 1896 to 11½ seers to the rupee. Distress became evident in the Sohāgpur and Hoshangābād tahsils. [To give relief the forests were again thrown open. Notwithstanding, the death-rate rose still further to 48 per mille, while the birth-rate remained constant.

189. The famine of 1896-97 was due to the failure of the late monsoon. In June and July rain fell satisfactorily and with seasonable breaks. In August 22 inches were recorded. But

with a heavy fall on the 30th and 31st August the monsoon came to an abrupt close. The total rainfall for September and October was, in fact, only 17 inches. Early millets, such as *sawān* and *makkā*, which were reaped shortly after the drought set in, yielded a fair outturn. But the later autumn crops, kodon, kutkī and rice, failed completely. Field after field of kutkī in the Sohāgpur tahsil was abandoned as worthless. The spring crops suffered almost as badly. The scorching sun of September and October dried up the ground and rendered much of it unfit for sowing ; and though the winter rains saved something, the harvest was sufficiently disastrous. The cropped area was 185,000 acres, or 18 per cent. less than in the previous year. The outturn, which varied from village to village and even from field to field, was difficult to estimate ; but, according to the official figures, the combined harvest was only 31 per cent. of normal. Prices, already high, soon reached famine rates, and in 1897 the price of wheat averaged 8 seers to the rupee, of juār 11 seers, and of rice and gram $7\frac{1}{2}$ seers and 9 seers respectively. Impoverished by three years of scarcity, the country soon showed signs of distress. [So early as September 1896 relief measures became necessary in Hoshangābād town. Private subscription raised a sum of Rs. 2100, which was devoted to the improvement of Grey Ganj. As the distress increased, test works were opened by the Civil Department on the old Bombay Road in the Sohāgpur tahsil. Cash advances were given to the mukaddams of villages along the road to be spent by them on repairs. This experiment, however, was unsuccessful, and between November and January properly organised relief works were opened by the Civil Department on five roads, namely, those from Piparia to Sobhāpur, from Itārsi to Betūl, from Bābai to Bāgra, from Piparia to Pachmarī, and from Hardā to Handia. In February these were handed over to the Public Works Department, which subsequently also opened relief camps on the roads from Hardā to Dheknā.

and from Semri Harchand to Bhārkach. These seven works remained open until the end of the famine, and the highest number of persons to whom they gave relief was 52,500 in May 1897. In addition a tank at Sobhāpur was constructed, while the Forest Department took in hand some forest roads. A sum of Rs. 20,000 was also advanced in loans for smaller works. Of this, Rs. 8000 were taken by the Bairi estate, then under Court of Wards management, for the improvement of the Bairi tank, and the balance was distributed to agriculturists, chiefly in the Hardā and Seoni tahsils, for the construction of field embankments. A poor-house was started at Hoshangābād in December 1896 by private subscription, but was subsequently taken over by Government. At the same time a Government poor-house was established at Sohāgpur. Village relief was not commenced until the last week of March 1897, and only assumed considerable proportions in the ensuing rains. The highest number thus relieved was 8800 in October 1897. Kitchens were also opened at the end of August ; but owing to the difficulties of communication in the rural areas during the rains, this measure was generally unsuccessful. Twenty-six kitchens in all were established, but the highest number of persons who received relief from them was 490 in November. In addition to the relief works already detailed, the Government forests, as in previous years of scarcity, were thrown open, and all dues were suspended. To sum up, relief measures lasted from November 1896 to December 1897, and during this period the highest number of persons to whom assistance was given in one day was 68,800, on May 15th, which is equal to nearly 14 per cent. of the total population of the District. The total expenditure on relief was nearly 16 lakhs, and the total number of day-units relieved was over 14 million, the incidence per day unit being thus 1 anna 9 pies. In addition to measures of direct relief, nearly 4½ lakhs of land revenue, equivalent to 52 per cent. of the total demand, were suspended ; some 2½ lakhs from the Indian charitable

grants were distributed for the purchase of seed-grain and bullocks ; and Rs. 27,000 were advanced to agriculturists as *takāri* loans. Notwithstanding all efforts, the death-rate, swollen by the influx of dying immigrants from Bhopāl, rose to 68 per mille for the year, while the birth-rate sank to under 29. The mortality was highest in May and October, when death-rates of 7·7 and 8·2 per mille respectively were returned. But perhaps the most disastrous result of this year's famine was the contraction of the cropped area, and more especially of the area under wheat, which weakened the people's power of resistance to the bad years to come. The uncultivated fields became overgrown with *kāns*. Landlords and tenants alike were embarrassed with heavy debts, both to Government and to money-lenders. The Deputy Commissioner summed up the situation in these words : 'The District is bankrupt, and requires at least two good crops to become solvent.'

190. Hopes for good harvests were not realised. The monsoon of 1897 was very favourable for

*The years 1897
to 1899.*

all autumn crops, which yielded a full outturn. But the deficiency of rain in September and October and the almost entire absence of winter rains seriously affected the spring crops, and the combined outturn was only 64 per cent. of normal. The price of *juār* was 21 seers, while wheat averaged only 11 seers. Next year was as bad. Heavy and almost continuous falls of rain in July and August interfered with the growth of the autumn crops, and hampered weeding operations. The *juār* was also damaged by insects. The germination of the spring crops was good. But the monsoon ended too abruptly ; and prospects, which were hopeful until early in December, were finally ruined by a period of hot and cloudy but rainless weather, followed by cold winds in January. The combined outturn was only 63 per cent. of normal, and in the eastern half of the District was poorer still. The price of *juār* showed a slight increase, going up to 18 seers

per rupee, while wheat and gram became a little cheaper, selling at 12 and 17 seers per rupee respectively. (Relief measures on a very limited scale were undertaken, consisting only of the distribution of village relief in 30 villages of the Bankheri circle for a period of $2\frac{1}{2}$ months in the hot weather and the rains.)

191. In this condition the District was called upon to face the famine of 1899-1900. The

The famine of
1899-1900.

monsoon of 1899 set in on June 18th, and in that month there was sufficient rain

for the sowing and germination of the autumn crops. But throughout July, August and September the rainfall was scanty and intermittent. Moderate or heavy falls of rain were followed by long periods of bright sunshine and intense heat, which did incalculable damage to the growing crops. In September there was but one fall of any importance, and October was rainless. The total rainfall of the District from June to October was only $25\frac{1}{2}$ inches, or about half the normal. This deficiency and still more the intense heat of the sun during the breaks were disastrous to all autumn crops except cotton and til. More serious still, much of the land was rendered unfit for the sowing of wheat, the crop on which the prosperity of the District depends. The failure of the monsoon was not compensated by winter rains. November and December were rainless, and though a few showers fell in January, they came too late to save the situation. The combined outturn was only 28 per cent. of normal. The price of wheat had risen to $8\frac{1}{2}$ seers per rupee by October 1899, and in 1900 averaged 9 seers. From October 1899 to November 1900 the price of juār averaged less than 10 seers per rupee, rising to 7 seers in July, and in some months juār was not procurable at all. Rice and kodon sold at $9\frac{1}{2}$ and 9 seers per rupee respectively during 1900, and gram at 10 seers. By the end of September 1899, signs of distress were apparent. Pending the organization of regular famine works, kitchens were established, supplemented by

village relief for those who were unable through infirmity to attend the kitchens. By the end of October relief works were taken in hand. Altogether eight large camps were opened by the Public Works Department in different parts of the District. The work undertaken was chiefly on roads or railways. The roads from Khirkīān to Chārwa and from Timarnī to Sodhalpur, and portions of the old Bombay Road, were raised in class, and a new road was cōstrūcted from Rahatgaon to Sodhalpur. Metal was collected on the roads from Itārsi to Betūl, from Piparia to Pachmarī, from Hardā to Handia and from Khirkīān to Chārwa. The Itārsi-Betūl and Hardā-Handia roads were also improved. The Great Indian Peninsula line between Itārsi and Seoni was doubled, and an improved approach to the Nerbudda railway bridge at Hoshangābād was embanked. The village tanks at Chhipābar, Pathrotā, Itārsi and Apgāon were also improved. In addition, a number of village works were undertaken by the Civil Department, of which the repair of 49 tanks and the embankment of 15 fields were the most important. The Forest Department also constructed or repaired forest roads totalling 75 miles in length. Grass-cutting operations were undertaken at 43 centres. Altogether 9400 tons of grass were cut at a cost of Rs. 64,000, of which 2200 tons were sent to Bombay, and 700 tons disposed of locally. The amount thus realised was only Rs. 26,000. Minor village works were also undertaken, such as the eradication of the *powār* or wild indigo plant, the completion of wells, improvement of village sites, and the weeding of fields. No poor-houses were established, but the kitchens at Hoshangābād and Hardā were often crowded with starving wanderers from Bhopāl and Indore, necessitating special medical arrangements. Pauper wards were organized at all dispensaries. Relief operations continued from September 1899 to November 1900, at a total cost of nearly 20 lakhs. The number of day units relieved was nearly 224 million, giving an average incidence of 1 anna 5 pies.

per unit. As in 1897, some $4\frac{1}{2}$ lakhs of land revenue were suspended. Nearly $2\frac{1}{2}$ lakhs were distributed in charitable grants, and over a lakh was loaned to agriculturists for the purchase of seed-grain and bullocks. Forest concessions were also granted, representing an estimated value of Rs. 18,000. Government relief was supplemented by private charity. The American Mission at Hardā gave employment to 300 persons daily for $3\frac{1}{2}$ months, established cheap grain shops at Hardā, Timarnī, Handia, Rahatgaon and Chārwa, distributed clothing and blankets to about 1500 persons, and issued some Rs. 7000 in loans to cultivators, weavers and Chamārs. The Friends' Mission at Hoshangābād also employed many indigent persons from November 1899 to October 1900 in constructing wells, collecting *kankar* (limestone nodules) and gravel, lime-burning and stone-breaking. Weavers, too, were given work, and their cloth distributed. It is estimated that the missions expended $2\frac{1}{2}$ lakhs on relief. The jāgīrdār of Bāriām-Pagāra and the sūbahdārs of Tāku and Bōrdhā also assisted their tenants and labourers by maintaining small village works, distributing mahuā, and remitting rents.) The death-rate was not high until June 1900, when cholera, which accounted for one-third of the mortality during the famine, broke out. From 3·8 per mille in May, it rose to 6·4 in June, and 6·7 in July, and reached its highest, 7·4 per mille, in August. In September and October it was 6·2 per mille, and fell again in November to 4·5. For the whole year 1900, the mortality was 57·2 per mille, and the birth-rate 33·6.

192. This series of bad years, culminating in two severe famines, changed the face of the once prosperous District. During the 7 years from 1894 to 1900, the annual death-rate averaged 45 per mille, and the birth-rate only 35, while between the censuses of 1891 and 1901 the total population decreased by nearly 10 per cent. Actual cash losses from crop failures were estimated at more than 4 crores of rupees. And even:

The result.

this figure is far from representing the full extent of the disaster. The total cropped area decreased between 1893-94 and 1900-01 by 224,000 acres, or 21 per cent. More serious still, want of means to buy wheat seed, loss of the cattle required for careful cultivation, and the desire for early returns, induced cultivators to substitute inferior autumn crops for the valuable staples, wheat and wheat-gram. 'I well remember,' wrote Mr. Low¹, 'in 1894 the waving sea of wheat to be seen from the overhead bridge at Itārsi station. Now many of the fields are waste and most of the rest carry ill-kempt crops of straggling tūr or juāri.' The area cropped with wheat diminished during the same period by 369,000 acres, or 55 per cent. The annual loss in the value of the produce incurred by such a substitution was estimated by Mr. Low at not less than Rs. 10 an acre. Moreover, though the local agriculturist is a skilful wheat grower, he does not understand the cultivation of autumn crops. Except in the Hardā tahsil, the mixture of juār, tūr, mūng and urad, which was most commonly substituted for the old crops, was generally sown broadcast in imperfectly prepared land. Thus weeding by hand alone was possible, and this was often neglected. As a consequence the noxious weed known as *kāns* (*Saccharum spontaneum*) obtained a firm foothold in many fields in which it was unknown before, or, if present, was kept under control by the ordinary operations of agriculture. Once established, the cultivators found that with poor cattle and diminished resources they were unable to eradicate it, and in this way, too, large areas went out of cultivation. In addition to cash losses and the deterioration of the land, mālguzārs and tenants alike were generally overwhelmed in debt. Improvident in years of prosperity, they were without a reserve to meet the losses of the bad cycle. Arrears of land revenue amounted to nearly 10 lakhs ; and inquiries made during the

¹ See para. 8 of the report on the abatement proceedings by Mr. C. E. Low, I.C.S., dated 24th May 1902.

subsequent abatement proceedings showed that the debt due from tenants alone totalled approximately $1\frac{1}{2}$ crores. Credit was suddenly contracted, and debts that had not been pressing in more prosperous times could not be repaid without the sale of property which had lost half its value. At the same time creditors had large numbers of villages and scattered holdings thrown upon their hands, which they were unable to manage and could not profitably let.

193. The need for a revision of the recent settlement was at once recognised. The details of the

The recovery. revision will be found in the chapter on

Land Revenue Administration; but it may be noted here that the revenue demand was permanently lowered by about 1 lakh, while a further temporary abatement of 1.36 lakhs was granted for the three years 1900-01 to 1902-03. For the restoration of credit, the extensive operations for the conciliation of debts described in the section on Loans were undertaken, and resulted in the remission of $74\frac{1}{2}$ lakhs of tenants' liabilities. Aided by these concessions and favoured by fair and sometimes good harvests, the District is gradually recovering. No difficulty is experienced in collecting the reduced revenue. The total net cropped area has indeed increased by only 6 per cent. since 1900-01, but the spring harvest has once more recovered its pride of place, and the area under wheat has increased 46 per cent. By improved methods of agriculture fields abandoned to *kāns* are slowly being reclaimed. The increase in cotton growing, which before the famine was almost negligible, has opened up a fresh avenue of prosperity. Finally, the debt conciliations have impressed upon all the necessity of a more economical finance.

194. In his report on the Settlement of 1896¹, Mr. Sly summed up the conditions of a good harvest thus: 'The monsoon rainfall should be substantial for the *kharif* crops,

General remarks on
famine.

¹ See para. 85.

'but should not be too heavy and continuous to prevent ploughing for the all-important *rabi*. There should be a good fall in late September to prevent the land from becoming too dry, and light showers are required during the sowings in October and November. Under these conditions a full area will be successfully sown. After that, the cold weather rainfall is an important factor, making all the difference between a full and poor harvest. Light showers are required to prevent withering and to fill out the wheat ears, but these showers must not be so heavy and continuous as to cause rust and blight.' Rainfall statistics¹ show how regularly these conditions are fulfilled, and until the recent bad cycle the District had always been remarkably free from famines. Failures have usually been caused by damp cold weather and excessive winter rains, when the spring crop has been attacked by rust. This is one of the reasons why irrigation has not so far met with much favour in this District. But the famines of 1897 and 1900 were due to the abrupt closure of the monsoon, and the failure of the autumn rain.

¹ See para. 22.

CHAPTER VIII.

LAND REVENUE ADMINISTRATION.

195. There are no records showing the system of land

*Early systems.
The Marāthā settle-
ments.*

revenue management in the time of the Gond dominion; and the precise nature

of the mālguzāri or pateli tenures of that period is unknown. Mr. (Sir C.) Elliott, however, concluded, from such information as was available, that the country was divided into *tālukas* held by *jāgirdārs*, who subleased the villages at their own pleasure to the cultivating classes of the population. The system adopted by the Marāthās is well known. These outlying tracts of their kingdom were held by kamaishdārs or *amils*, semi-independent governors over whom the central government exercised but little control. Of these kamaishdārs, some, especially the earlier ones, held the government on the *amānat* system, remitting to headquarters the whole collection less expenditure. Rai Singh, Havildār of the Paigah, who ruled in Hardā from 1815 to 1830, held the District in *kabz*; that is, it was made over to him at a valuation instead of so much pay for his army, and he raised his revenue in whatever way he chose, generally by direct management through trusted agents. Latterly it became more customary to lease out the government by contract (*ijāra*) to the highest bidder. The kamaishdars were almost all Marāthā Brāhmans; but on three occasions mālguzārs of the District took the contract. It is interesting to notice that the second of these, Mohan Singh Thākur of Deotalāo, was exceptionally harsh and exorbitant, and was ultimately deposed on the representations of a deputation of Gūjars, whose leader Mān Singh, being appointed kamaishdār in his stead, decamped after two years with Rs. 18,000.

The kamaishdār had full power to assess the revenue of each village as he chose. The settlements were all annual, and no village headman had any right of renewal of his lease. The assessment was settled between the pargana officials, such as the mandloi or kānungo, representing the kamaishdār, and the cultivators' representatives, such as the chaudhari. It was fixed at the highest bid, which it was the duty of the pargana officials to make as high as possible, and the interest of the cultivators' representatives to keep as low as possible; and the amount so settled was divided among the cultivators. The land revenue proper, or *ainjamā*, was, however, only a portion of the payments. Innumerable dues or cesses were also levied, generally as a percentage of the *ainjamā*, which they sometimes almost equalled in amount. Mr. Elliott enumerates 42 different minor cesses which were paid in the Hardā-Handia tract during the last ten years of Marāthā rule, and adds that there were still a few more which he could not ascertain with certainty. An interesting and detailed account of the Marāthā revenue system is to be found in the Settlement Report of 1865, Chapter II, paras. 38 and following, to which the reader is referred for further information.

196. When the Marāthās extended their conquests to this District, they found that, while the country round Hoshangābād was in the hands of the Muhammadans of Bhopāl,

Tenures under
Marāthā rule.

the rest of the District was ruled by Gond Rājās tributary to the Gond kingdoms of Mandlā and Deogarh, or held in large estates and jāgirs by the leaders of Gond and Korkū tribes. In this outlying portion of their dominion the Marāthās did not altogether destroy these chiefships. The Gond Rājā of Makrai maintained a semi-independent position among the hills, and was subsequently acknowledged by the British Government as a Feudatory Chief. In the valley the Marāthās were able to keep a tighter hold, and though the Gond Rājās of Fatehpur and Sobhāpur were continued in possession of their country, their powers of sovereignty

were strictly limited. The tribal chieftains occupying the Sātpurā hills around Pachmarī were also allowed to remain in their jungles on a service tenure, under which they were required to keep the pathways over the hills free from marauders, so as to permit pilgrims to visit the sacred shrine of Mahādeo in the Pachmarī hills. Lower down the valley the Korkū headmen of Dāmjjipurā¹ and Bairi retained their estates, but in the rest of the District the aboriginal leaders were shorn of their possessions. The Marāthās did not create any large estates in their place, except in a very few instances as *muāfi* or revenue-free grants for distinguished services. Benī Singh Sūbahdār, a Kanaujia Brāhmaṇ, for his bravery in an assault on the Hoshangābād fort in 1795, was given the Bordhā *tāluka* of 39 villages. The first governors of Hardā, two brothers of the Bhuskute family, as a reward for their operations against the Makrai Rājā, received six villages round Timarnī free of revenue in perpetuity, and seven others upon which a portion of the revenue was assigned to them. Daulat Rao Sindhia also gave the Balrī² estate of seven villages to a Pathān Musalmān as a reward for military services. But except for these instances, the Marāthās leased out each village singly under the system of settlement described above. Mr. Elliott has given a graphic account of the tenure upon which these patels held, which shows that both in theory and practice it was very insecure :³ ‘Under the Marāthā rule ‘it is well known that the position of a mālguzār was one ‘which conferred no rights and had no stability. Whether ‘under the Bhonslas in Hoshangābād or under Sindhia in ‘Hardā, when the *amil* made his yearly settlement, there was ‘no reason whatever why he should make it for any given ‘village with the same man with whom he made it last ‘year. The patel not only had no legal right of renewal, but

¹ Transferred in 1904 to Nimār.

² Transferred in 1898 to Nimār.

³ Settlement Report, Chapter IV, para. 16.

'the custom of renewing the lease was not even sufficiently prevalent or universal to create a *quasi* right, or to enlist public opinion strongly on the side of renewal. Of course, so long as there was no competition for the place, the *amil* had no motive for ousting the occupant; but if anyone appeared and offered to pay a higher revenue, there was nothing to restrain the *amil* from accepting his offer, and making the village over to him. In consequence of this, the position was not much valued, and was easily thrown up; so that the regular succession of patelship was attacked from two sides, the *amil* being ready to oust the patel if he got ever so little advantage from it, or the patel being apt to resign if he experienced ever so little loss.' Among tenants no right of occupancy was recognised under the Marāthā rule, either on the part of the ryot or the patel. There was no distinction between new and old cultivators, every one being only entitled to hold until someone outbid him; and outbidding was the recognised form of ouster. 'It would probably have been thought a hardship,' says Mr. Elliott,¹ 'if the patel had ousted any Naboth of a cultivator, merely to take his field himself, but I should doubt if any *amil* would have paid attention to the cultivator's complaint.' Moreover, while the management of the ryots was generally left with the patel, the kamaishdār or *amil* sometimes interfered by maintaining or ousting someone against his wishes. But although the tenant was without any recognised right of occupancy, in practice his position was a strong one, as it must always be when the demand is for cultivators to till the land, and not for land for cultivators to till. The agricultural population had not lost its migratory habits, and the very existence of the village depended on keeping the tenants in it.

197. The history of the early assessments under British rule is complicated, and for two reasons a comparison of figures is apt to be misleading. In the first place, the area

The beginning of
British rule.

settled varied considerably at the different settlements. For while the Sohāgpur, Hoshangābād and Seoni tahsils were ceded in 1818, Hardā remained part of Gwalior until 1844, and its revenue history must be dealt with separately. Again, the Rājwāra pargana, that is, the eastern half of the Sohāgpur tahsīl, was attached to the Narsinghpur District until 1827, while the Fatehpur Rājās continued to pay their revenue at Narsinghpur until 1830, when the whole of the Fatehpur estate, including the villages east of the Dudhī, was assessed from Hoshangābād. In 1835 Narsinghpur, Betūl and Hoshangābād were incorporated in one District, and it was not until 1843 that the boundaries which existed at the time of the settlements of 1863-65 and 1891-96 were fixed. Some allowance, too, must be made for the resumption of *muāfis*, or revenue-free grants. Secondly, in criticising the high assessment of the early settlements, it must not be forgotten that they were based on a different principle of taxation, and that decrease in the share of assets claimed by Government accounts for a considerable proportion of the subsequent reductions of revenue. The first and second quinquennial assessments were made on the basis of leaving 15 per cent. of the assets for the lessee, and taking 85 per cent. for Government. At the third settlement the share of Government was reduced to 80 per cent., while this was again lowered to 66 per cent. at the twenty years' settlement. The standard fixed for Mr. Elliott's settlement was half assets, but as will be shown hereafter, owing to an error in the assumption of the extent to which the tenants' rents would rise, the share actually taken by Government was only 46 per cent.

198. After the cession of 1818, two annual settlements were made as a temporary measure. The first quinquennial settlement. They appear to have been nearly the same as the demand of the Bhonsla government and to have been based in the same way on the village papers and kānungs' estimates. In 1820 the District

became part of the Saugor and Nerbudda Territories, in the charge of the Agent to the Governor-General at Jubbulpore, and the following year saw the first quinquennial settlement. The assessment of the Sohāgpur pargana and a small part of Hoshangābād was made very judiciously by Mr. C. Fraser, and the demand of Rs. 38,000, being low enough to encourage increase of cultivation, required no subsequent reduction. The settlement of Seoni and the part of Hoshangābād which had formerly belonged to Bhopāl and was known as the Hoshangābād "Peshkāri," was effected by Major D. Macpherson, and his work is stigmatised by Mr. Elliott as 'probably the worst settlement ever made.' "The Peshkāri" was depopulated and impoverished by years of Pindāri oppression. But Major Macpherson seems to have been one of those sanguine men who held the opinion, common at that time, that the benefits of peace and security conferred by British rule would at once commend themselves to native feeling, and by attracting capital and population would cause a complete revolution in the state of things then existing. He at once raised the assessment of the Peshkāri from Rs. 36,200 to Rs. 63,700, an increase of nearly 76 per cent., and further provided for annual increments whereby payments in the fifth year of the settlement would be higher by 50 per cent. than in the first, and nearly treble those of 1820 A. D. The case of Seoni was even worse. 'Major Macpherson,' wrote Mr. Elliott. 'had chastised Hoshangābād with whips; Seoni he scourged with scorpions.' It had escaped more than any other tract from the devastations of the preceding years, and there was less uncultivated land to take up, and a smaller number of evicted tenants to return. It was thus less able to bear a great increase than Hoshangābād was, and even with the most sanguine views on the benefits of British rule, there was good reason to hesitate in adding at all to the revenue that the Marāthās had collected. Yet Major Macpherson increased the assessment from Rs. 96,000 to Rs. 1,56,000,

and, following the same system of yearly increments, fixed the payments for 1825 at Rs. 2,02,000. This settlement at once broke down. Mr. Fraser revised the Seoni assessment in the very next year, reducing it to Rs. 1,38,000 and abandoning the annual increments. The demand for Hoshangābād was similarly reduced in 1823 by Major Ouseley, who remitted practically the whole of the yearly increase. Even these remissions were not sufficient, and, in spite of strenuous and sometimes not too scrupulous efforts, collections invariably fell below the demand. The evils of this unfortunate assessment were not confined to the currency of the settlement. It left its sting behind, by disturbing the proper relations of things, and making it hard to believe that the error could have been so great as it seemed to be. The history of the different settlements from this time shows nothing but one continuous course of reduction—the Settlement Officer each time thinking he had lowered the revenue sufficiently to make it light, and each time finding that he had not gone far enough; till at last, in the twenty years' settlement, the proper amount was reached, and the downward tendency caused by a single over-assessment stopped. The moral aspect was even more deplorable than the economic. For the belief not unnaturally obtained that taxation to the last anna was the policy of the new Government. Major Macpherson's settlement was, in fine, one of those tremendous mistakes, the effect of which many years of subsequent moderation and justice were hardly able to efface.

199. In 1823 began the reign of Major J. R. Ouseley, which continued with one short interval

Second and third quinquennial settlements. until 1839. His name is still a household word throughout the District, which owes

its subsequent prosperity largely to his wisdom and judicious management. His first assessment, however,—the second quinquennial settlement of 1826,—showed that he had not yet thoroughly learnt how necessary a light revenue is to encourage settlers and to promote

improvements. He lowered the assessment of Seoni, but only by about 5 per cent.; and he actually increased the revenue in Hoshangābād and Sohāgpur, so that the total demand for the District was raised to Rs. 2,70,000, a slight enhancement of about 6 per cent. on the revised assessments of the first quinquennial settlement. It was still necessary to make annual remissions; but at the third quinquennial settlement of 1831 Major Ouseley made large and sweeping reductions, lowering the revenue of Seoni by almost a half, and of the other two parganas by substantial amounts. Thus, though the Rājwāra pargana, assessed at Rs. 41,000, was for the first time included in the settlement of this District, yet the total demand was lowered from Rs. 2,70,000 to Rs. 2,29,000.

200. In 1836 Major Ouseley made his third settlement—

The twenty years' settlement. the twenty years' settlement which actually remained in force until 1864.

Except in Rājwāra, the assessment was still further reduced, the total demand for the District being only Rs. 2,10,000. Though intended for so long a period as 20 years, this settlement seems to have had but a slender foundation of statistical facts. Rough measurements were made by *amīns*, and all statistics of cultivated and culturable land, of rent and revenue rates, were deduced from them. It was popularly said that the *amīn* climbed up a tree, and estimated all the land he could see, and mālguzārs made no secret of preventing them from visiting outlying fields, and so on. Mr. Elliott, criticising the accuracy of this work in the light of his own enquiries, remarked¹: ‘They probably estimated the land chiefly according to the cultivator’s statement of the seed he sowed on it, and, while their return of waste land and hill is wildly incorrect, I am inclined to think that they made a very fair approach to accuracy in estimating cultivated land, though always a little below the true amount.’ But more important

¹ Settlement Report, Chapter II, para. 54.

than statistical facts, the ability of the assessing officer and his great local knowledge enabled him to give the District what it so long had needed,—a revenue fixed on light and equitable terms, and for a period long enough to afford a fair return for the expenditure of labour and capital.

201. In the same year the administration of this territory was directly subordinated to the Government of the North-West-Provinces and the Sadar Board of Revenue.

The end of patriarchal rule. This change and the departure of Major Ouseley in January 1839 mark the end of patriarchal government in the District, and the beginning of the reign of law and *nakshās*. As far as personal character is concerned, the patriarchal system can hardly have had a better representative, and probably no District Officer will ever be half so popular as "Wassly Sāhib" was, or fulfil so thoroughly the native idea of perfection in a ruler. He lived among the people, entertained them in large parties, was a guest at their festivals, and shared in some of their ceremonies. His wife, Gangā Bibi, was a Brāhmaṇ lady of Khatāma. Justice was administered in a simple, untechnical manner, and even the jail prisoners obtained leave of absence for two or three months together, and, being put on their honour, always came back.¹ But among all this friendliness and mutual good feeling and sociability, there was a great deal of distress and suffering in the District, and it was a time of retrogression, or of very slow progress. This was partly attributable to the unfortunate over-assessment, and partly to the mischievous habit of interference in everything, which is the bane of the patriarchal system. Capitalists were the especial victims of the protectors of the poor. Seed-grain was seized from the stores of merchants and distributed amongst cultivators; prices were arbitrarily fixed; exports were prohibited; money-lenders were compelled to make advances to insolvent cultivators, to submit to fixed rates

¹ Mr. Elliott's Settlement Report, Chapter II, para. 53.

of interest, and, finally, in many cases, to forego their profits on receipt of the principal; and so on. But in criticising this system of interference, the nature of the early settlements must not be overlooked. The margin of profit to the mālguzār was so small that the departure of two or three cultivators was enough to ruin him and break down the settlement. ‘For this reason,’ as Mr. Elliott wrote,¹ ‘the cultivator had to be “preserved;” dogs and traps were kept to ward off or to catch vermin, i.e., creditors, and he was fair sport only for persons with Government licenses.’ The early settlements, in fact, though nominally mālguzāri, were to all intents and purposes ryotwāri, and, as such, justified some degree of interference. Considering the want of population and capital at that time, it is probable that a regular ryotwāri settlement would have been the best policy. As it was, with such a heavy assessment, a semi-ryotwāri system was certainly the only way in which the revenue could be collected and the country kept from depopulation. It was the moderation of the twenty years’ assessment that made such interference unnecessary, and rendered possible the change from arbitrary government to the administration of law; and it should not be forgotten that the author of that assessment, from which the wealth and prosperity of the District date, was Major Ouseley, the representative of patriarchal rule.

202. In 1844 the Hardā-Handia tract was ceded by Sindhia, together with other territory, to meet the expenses of the Gwalior contingent, and was attached to the Hoshangābād District. The Nimāwar pargana, north of the Nerbudda, was made over at the same time, but was returned to Sindhia in 1860, when the cession of Hardā became absolute. The Hardā-Handia tract was ceded as the equivalent of Rs. 1,29,000 a year, and Marāthā collections of previous years had been as high as Rs. 1,64,000. Captain Spence, however,

¹ Settlement Report, Chapter II, para. 56.

to whom the settlement of the new territory was entrusted reduced the demand to Rs. 90,000. This settlement, which was made on the village papers, continued in force for two years. In 1846, Captain Spence made a five years' settlement, based on rough measurements by *amīns*. The assessment, which was fixed at Rs. 96,000, was moderate and judicious, and under its influence Hardā throve abundantly.

203. Major Ouseley's twenty years' settlement expired

The thirty years' settlement. in 1855, and in 1853 survey operations pre-

paratory to the new settlement were begun. The District has always maintained a patwāri establishment, which is said to date from Gond rule, and was certainly kept up by the Marāthās ; and this survey was made with the sight-vane and plane table by the village patwāris. But the need for instruction and constant change in the staff of patwāris, who often could not be persuaded to remain in their appointments for more than two or three months, made progress slow ; and when work was suspended by the disturbances of 1857, only 88 villages had been measured. In 1859 operations were resumed, and by the rains of 1863 the field-to-field survey of the District was completed. In the same year the revenue survey was commenced. The whole cultivated valley was surveyed, village by village, to the foot of the hills, and mapped on the scale of one inch to the mile, the work being finally concluded in 1866. The assessment proper was entrusted to Mr. (now Sir Charles) Elliott, who took charge of the settlement in March 1863 and completed it in April 1865. Mr. Elliott began at the Dudhi river and worked westwards, and he was of opinion that the eastern parganas suffered somewhat from the inexperience of the settlement staff, especially in the classification of soils. The total cost of the settlement was rather more than $2\frac{1}{2}$ lakhs, of which $1\frac{1}{2}$ lakhs were expended on survey. The report, to which frequent reference has been made in this volume, is one of the most interesting books relating to the Central Provinces. Mr.

Elliott found that during the past twenty-six years the District had prospered exceedingly ; the population had increased about one-third ; communications had improved, and a railway was being opened throughout the length of the District ; the export trade had increased, and the towns along the railway were rapidly becoming important centres of commerce ; prices had risen from a rate of 48 seers of wheat per rupee to 16 seers, and were not likely ever to fall again below 32 seers ; cultivation had extended about two-thirds, and the high wages paid by the Railway company were enabling labourers to become cultivators, and so creating an increasing competition for land ; the agricultural population, both mālguzārs and tenants, were a prosperous community with an ever rising standard of comfort ; and the land was generally fertile, yielding a good surplus of profit after payment of the expenses of cultivation. All these considerations pointed to a substantial enhancement of the revenue.

204. At that time principles of settlement were worked from the aggregate to detail, and

**Principles of
the assessment.** not as at present from detail to aggregate. It was thus necessary to estimate

the increase of revenue for the District as a whole, to distribute that increase among the parganas, and again to distribute the pargana total among the individual villages. The basis of such an estimate must be a calculation of the rent-rates likely to be realised by mālguzārs. Mr. Elliott found that customary rates of rent per acre were unknown, each holding as a whole paying a fixed sum, which varied much from village to village and from holding to holding without regard to the extent and fertility of the land. He could, therefore, obtain no assistance from existing rents in fixing fair rent-rates per cultivated acre for each class of soil. He also discarded two guides which were then prescribed to Settlement Officers, namely, plough-rates and produce-

rates;—the first as combining the uncertainty of rent-rates with uncertainty of area; the second as depending on too many assumptions of average produce, average price, and so on, to be at all trustworthy in calculating the rent of a single holding. Having rejected these methods, the three guides which he followed in framing his assessment were the revenue rate of the former settlement, the existing average rent-rate, and soil-rates. The revenue rate at the twenty years' settlement was estimated at 10 annas per cultivated acre. The extension of cultivation to inferior land, which had diminished the *sikai* assets from fallow and waste, and the reduction in the Government share from two-thirds to one-half of the total assets, pointed to a decrease in the revenue rate, whilst the increase of population, the competition for land and the rise in prices pointed to an increase. Balancing these varying factors, he considered that the same revenue rate of 10 annas per cultivated acre would be a fair standard to assume. It was next for him to consider the extent to which rents would be raised. He found that during the twenty years' settlement there had been a slight fall. The reason for this was that while the size of almost every holding had been increased, its rent had generally been allowed to remain the same, partly through the mālguzārs' ignorance of their rights, partly because of the difficulty of enhancement under the law of the Territories, but still more from a certain loftiness and largeness induced by prosperity, which scorned the idea of haggling about an anna per acre less or more. On the other hand, the rise in prices, creating competition for land, had only begun very recently, when the impending settlement naturally deterred mālguzārs from disturbing the existing rental. After a careful consideration of the local conditions, especially the migratory character of the population, he assumed that he might expect a general rise in rents of four annas in the rupee, and this would give a general rent-rate of R. 1-3-5, half of which would just about equal his

former estimate of a revenue rate of 10 annas per cultivated acre. Having thus decided approximately the revenue rate to be assessed on the whole District, he proceeded to distribute this assessment over the individual villages by means of soil rates. His simple classification of soils, which recognised only four classes, is described in the chapter on Agriculture. To estimate corresponding rent-rates was more difficult. The rule of thumb by which rents were then fixed, made it possible to produce a satisfactory number of precedents for any rate from 8 annas to 2 rupees for any class of soil. But the soil rates finally adopted by him, as representative of the great mass of the villages of the valley, were R. 1.8 per acre for the first class, R. 1.4 for the second, R. 1 for the third and R. 0.8 for the fourth. The patwāris' rent-rolls showed the existing rent-rate with fair accuracy; and by comparing it with his soil-rates he was able to decide what increase of rents was likely to occur, and what would be a fair assessment of the village upon this assumption. Proceeding upon these principles, Mr. Elliott raised the land-revenue assessment of the District, as then constituted, from Rs.3,10,000 to Rs. 4,14,000, excluding the valuation of revenue assignments from both figures, or to Rs. 4,28,000, including this valuation in the latter figure. The increase was thus 35 per cent. on revenue-paying villages, giving a revenue rate of R. 0.9-6 per cultivated acre. This assessment was undoubtedly light, even for the basis upon which it was made, but while criticising it, the Chief Commissioner accepted it as reasonable on these grounds: 'Hoshangābād lies lower down the Nerbudda valley than Jubbulpore, Damoh and Narsinghpur; its corn-producing tracts are nearer to the corn-consuming tracts of Mālwā and Khāndesh, yet its revenue falls at $9\frac{1}{2}$ annas per acre of cultivated area, while the revenue of the three Districts above named falls at $11\frac{1}{2}$ annas or over $11\frac{1}{2}$ annas per acre. This disparity would at first seem unexplainable. Indeed, the position of Hoshangābād nearer to the western Districts, where high

' prices prevail, and on a railway which connects it with ' Khāndesh and Bombay, would have warranted an expecta- ' tion that the lands of Hoshangābād could and should pay ' a higher land revenue than the lands lying east of ' Hoshangābād on the Nerbudda river ; but the officiating ' Chief Commissioner believes the explanation to be this :— ' Hoshangābād has for the past 26 years paid a very light ' revenue. There is in this District such an ample supply ' of waste land that rents cannot rise in proportion to the ' rise in the value of produce. If landlords were to raise ' their rents suddenly and largely, their tenants would ' quickly betake themselves to the wastes of Hoshangābād ' or the neighbouring District of Niṁār. In view of these ' considerations, the Settlement Officer and yourself judged, ' and in the officiating Chief Commissioner's opinion you ' rightly judged, it unwise to raise the revenue suddenly to ' the full share of the gross produce of the land which ' Government may have a right to demand and which in ' some parts of India it does actually take.' Not only, how- ever, was the original assessment very light, but it turned out much lighter than it was ever intended to be. It has been shown that the assessment was based upon the assumption that rents would rise 25 per cent. But when rents were adjusted after its announcement, the actual enhancement made by the proprietors was 32 per cent. The result was that the assessment absorbed only 46 per cent. of the assets, instead of the standard of 50 per cent. fixed for the District. In view of this unexpected rise in rents, the Settlement Officer was authorized by Government to revise the assess- ment, but he considered that the importance of emphasizing its finality was greater than the importance of the revenue lost to Government, and so nothing was done. The assess- ment was thus notoriously lenient when it was introduced, whilst the rapid development of the District with the opening of the railway increased its leniency year by year.

205. The thirty years' settlement was distinguished by the conferral of proprietary and occupancy rights, in accordance with the

The growth of tenures. Proprietary rights. North-West Government's proclamation of 1854 and Act X of 1859. The instability of the Patel's position under the Marāthās has already been described. After the annexation, the British Government, finding that there was no permanency

of tenure and that a Patel was ousted or changed as easily as the lessee of a ferry, ruled that no proprietary right existed. It was specifically declared that the settlement of a village conferred no right of renewal, sale, or sublease, and many Patels were ousted for transferring their villages without the sanction of the authorities. Under the heavy assessments that followed, relinquishments were numerous, competition was destroyed, and it was only with difficulty that any one, or at least any capitalist, could be induced to take up a village. It is a significant fact that the post of village accountant was preferred to that of Patel. Up to this time, the only tenures which were at all permanent were those of the Rājās and the *muāfidārs*, who alone could claim to be landlords in the modern sense of the term; and it is noteworthy that the cultivator's rights of occupancy in a revenue-free village were popularly considered inferior to his rights in a revenue-paying village. The twenty years' settlement, however, with its light assessment, and the prosperity which ensued, entirely altered the value of land and the estimation in which it was held; and Captain Spence's five years' settlement in Hardā had the same effect there. No case occurred in which default had to be punished by ouster, and private transfer was extremely rare. The long continuous holding for thirty years gave a sense of permanency, and the profits of agriculture induced a considerable outlay of capital, which is the best proof of active agricultural possession. Nothing, then, could have been more opportune than the bestowal

of proprietary rights, rewarding past endeavour and encouraging future improvements. The gift was, in fact, estimated as equivalent to the investment of 50 lakhs of capital in the land. It is thus somewhat extraordinary to read that in some cases the offer of proprietary right was refused by Gond and Korkū patels, because they would not undertake the responsibility of paying any revenue, however light, for a fixed term of years. . The proclamation of 1854 laid down that zamindāri right was to be conferred 'on such persons as may appear to have the best right to such a gift, either from having had long possession, or from their having since the cession brought estates in their possession into cultivation, and regularly paid the Government demand on them.' It would thus seem that long possession was intended to imply possession from a time previous to the cession, which, except in the case of the *muāfidārs*, was practically unknown. As Mr. Elliott pointed out, the authorities of the North-West failed to appreciate the extreme youthfulness of the Nerbudda valley and the mutability of tenure that had prevailed. 'Just as in America,' he said, 'a church seventy years old is a monument of venerable antiquity, so here the memory reaches a very short way back, and a small period of time covers as much mental space as many centuries do in the ancient communities of the Doab.' But as no minimum period of possession was actually specified, and possession had been uninterrupted since the twenty years' settlement, 'no embarrassment,' as he remarks with some naïveté, 'was caused as to the interpretation of these terms.' The settlement of claims was generally simple. It had hitherto been the practice for a village to be leased to a single individual, and this individual alone was ordinarily given the proprietary right. The cases in which other members of the Patel's family claimed a share were few in number, a plot of land for maintenance being commonly preferred. This custom is

¹ Settlement Report, Chapter IV, para. 31.

not yet extinct, and it is characteristic of the District that there has been no minute subdivision of proprietary rights.

206. On the large estates, where it had been customary

Sub-proprietors.

to lease out most of the villages, a dual right of proprietorship had to be considered.

For some time after the cession Government had followed the Marāthā policy of non-interference ; but subsequently the idea had grown up that protection was in some cases desirable, and in 1841 a sub-settlement had been made with the lessees of the four Gond Rājās of Sohāgpur, which the Rājās were required to confirm. Many of these lessees had thus acquired a strong position in their villages, both by long possession and by Government interference. The Sadar Board was of opinion that a system of sub-settlement was disadvantageous alike to the revenue and to the interests of the estate and the people, and directed that, as far as possible, the absolute and exclusive proprietary right of one party or the other should be recognised. Mr. Elliott, however, found that the Board's instructions were unworkable and unfair to both parties ; and the rule finally adopted was, that where a lessee, holding uninterruptedly by unwritten leases, or without a written renewal at each succession, could prove antiquity of tenure, or where he had been the original founder of the village or had refounded it after the Pindāri raids, then he was entitled to sub-proprietary rights. This rule was construed liberally by Mr. Elliott, who conferred inferior proprietary rights in 128 villages. Out of the 220 villages in the Hoshangābād estates of the four Gond Rājās, an inferior proprietor was, in fact, recognised in no less than 101.

207. There remain the "cultivators with proprietary

Plot-proprietors. rights," or *mālik-makbūzas*. Four classes

were recognised at the thirty years' settlement, and assessed on different principles. In the first class were the relations of the patel's family who had accepted a plot of land in lieu of a share in the village. The second consisted of patels who had resigned or made over their

mālguzāri rights to another, on condition of retaining a certain portion of land for their maintenance. The third contained the owners of revenue-free holdings which had been resumed and assessed. In the fourth were included all the lessees of the Gond Rājās, who, although not granted an inferior proprietary status in their villages, were by long possession considered to be entitled to a proprietary right in their own home farm. Yet another class of cases was contemplated by the Sadar Board, which directed that if the claim to proprietary right in the village was not a strong one, each cultivator should be made proprietor of his own holding. But Mr. Elliott's interpretation of "long possession" as possession during the currency of the twenty years' settlement, practically excluded the possibility of such cases. 'No claims of the kind,' he wrote,¹ 'were ever brought forward by cultivators, nor does the idea appear to have even crossed their minds that any amount of duration could change cultivating occupancy into proprietary right.'

208. The position of the cultivator under Marāthā Right of occupancy. rule, alike in its strength and weakness, continued unaltered for some time after the cession. But under the patriarchal system the whole weight of the District Officer's influence was thrown into the scale on the cultivator's side, while the traditional policy of the North-Western Provinces Government was protection of the ryot against the patel. The idea was thus fostered that the tenant had some right of occupancy in the land which he cultivated. Mr. Elliott traces the growth of this claim as follows²: 'It is probable that the true cause of the strength of the cultivator's claim to occupancy is the under-population of the country. As long as there is no competition for land, but free room for every new comer, and for every one who wishes to extend his cultivation, so long the patel has no object in ousting a

¹ Settlement Report, Chapter IV, para. 58.

² Settlement Report, Chapter IV, para. 61.

‘cultivator. So long as there is a competition for labour, and ‘every cultivator feels that he is rather obliging his patel ‘than otherwise by settling or remaining in the village, and ‘that by removing he can inflict on him a heavy loss, so long ‘there can be no risk of his being ousted. This is still the ‘case in Bhopāl and Chārwa and other surrounding countries, ‘and it has only just ceased to be the case in the Hoshangābād District. So long as this period lasts, the cultivator never is ‘ousted,—and hence springs up the idea that he has a right not ‘to be ousted, an immemorial right, “ whereof the memory of ‘man runneth not to the contrary ” to occupy and hold the ‘land as long as he pays the rent.’ Mr. Elliott himself denied the existence of any “ rights ” whatever, maintaining that the cultivators’ claim was merely the opinion of one class of the people as to how they ought to be treated, that opinion being based on the way in which they were treated a little time back. The introduction of Act X of 1859 imposed the twelve years’ rule of occupancy. It was found, however, in this District that while a *dehi* cultivator, or resident of the village, was thought to have a better claim to occupancy than a *pāhi*, or resident of another village, no distinction was made between old and new cultivators, beyond the vague sentiment which always exists in the agricultural mind, that what is old should be maintained. Mr. Elliott accordingly proposed that occupancy right should be given to all alike, a recommendation which, if accepted, would have made an enormous difference in the subsequent history of the District. In introducing the Act, Mr. Elliott gave it a very wide interpretation. All the land cultivated by a ryot of long standing was ordinarily recorded as occupancy, irrespective of the date at which it had been brought into cultivation. Holding, too, that if a cultivator could be ousted from his pasture land, he might as well be ousted altogether, Mr. Elliott allowed occupancy rights in one acre of grass fallow for every three under the plough.

209. Rents for cultivators' tenures were at this time ordinarily paid in cash. But there also existed two systems of payments in kind which, though then scarcely known, were so widely extended during the currency of the settlement, and so generally abused, as ultimately to require repression. The first of these is known as *khot*, under which a tenant agrees to pay a fixed quantity of grain as the rent of the land taken by him. This system is not pernicious in itself; but in this District, owing to the high amount of grain fixed for payment, it resulted in the severest form of pressure upon the tenant. At the time of the thirty years' settlement the practice of *khot* was limited to a few villages in Hardā; but, during its currency, as the competition for land increased, it became very common all over the Hardā tahsil, and spread right up the valley. At the settlement of 1891-96 the usual rate was 3 *mānis* of wheat in Hardā, and 2 in Hoshangābād for one *māni* of land. Such a rent, amounting to Rs. 7-8-0 and Rs. 5 per acre, was found to be excessive, and poor harvests had resulted in irrecoverable arrears. Reasonable cash payments were accordingly substituted, and a clause prohibiting *khot* was inserted in the Record of Rights. The other system was the custom, known as *batai* or *batia*, of fixing the rent as a share of the produce. The proportion demanded was almost invariably one half. The landlord gave the land and advanced the seed-grain; the tenant used his own bullocks, and supplied his labour; after the crop was reaped, the seed-grain was returned to the landlord with interest at 50 per cent., the hired labour employed in reaping was paid, the dues of the village servants were given, and the balance was divided equally between the landlord and the cultivator. This also amounted to a heavy rent, but had the advantage that it varied with the yield of the season. Provided that the share of the produce demanded as rent is kept low, there is no objection to the system in principle; but practically the

cultivator becomes the servant of his landlord, and it is noteworthy that land was only taken on such terms by impoverished cultivators. When the thirty years' settlement was made, little except *sir*, or home-farm land, was leased on *batai*, but subsequently the rapid extension of the system made it necessary to notify the District under section 53 of the Tenancy Act of 1883,¹ which was applied to Hardā and Seoni in 1891 and to the two eastern tahsils in 1893. At re-settlement fair cash rents were fixed for such holdings. But it is still common for land to be leased to sub-tenants or tenants of *sir* on *batai*.

210. The currency of the settlement was a period of unparalleled prosperity. In the first place

Currency of the settlement. the bestowal of proprietary rights on mālguzārs and of occupancy rights on

protected tenants expanded credit and inflated the value of land. More important still, the opening of the Great Indian Peninsula Railway, which runs through the middle of the rich valley from end to end, completely revolutionised trade. In place of the difficult and comparatively local road traffic with Central India and Berār, there suddenly arose an immense and apparently assured export trade to Bombay and the markets of Europe, and the increase in the facilities for the disposal of surplus produce was naturally accompanied by a great and general influx of wealth. Exports increased fourfold, and the prices of agricultural produce doubled. The population rose by about one-fifth. The occupied area expanded 18 per cent., the cultivated area 31 per cent., and the cropped area nearly 29 per cent. The profits of agriculture were large; for the cost of cultivation and of living had not increased *pari passu* with the prices of produce. Some idea of the augmented value of land may be obtained from the consideration that the average rental for ordinary tenants rose from R. 0-13-9 to R. 1-11-10 per acre. The persons to benefit by this change

¹ Sec. 62 of the Act of 1898.

were the mālguzārs and the protected tenants. It was estimated by Mr. Sly that the mālguzārs' assets increased during this period from under 10 lakhs to nearly 16½ lakhs, while the Government demand for land revenue remained practically unaltered. Thus the assessment, from the first unduly lenient, now amounted to only 29 per cent. of the assets. Similarly the rents of the protected tenants, who had shared to the full in the new prosperity, had been but imperceptibly enhanced. On the other hand, though the general doubling of the rent-rates of ordinary tenants probably no more than represented the increased value of the land, in many cases their rents had been trebled, they were oppressed by the pernicious systems of *khot* and *batai*, and rack-renting was common. It was thus apparent that the basis of the new settlement should be, firstly, increase of the Government demand; secondly, enhancement of the protected tenants' rent-rates; and thirdly, the reduction of the excessive payments of the unprotected tenants. The manner in which this revision was effected will now be described.

211. The thirty years' settlement expired in 1894-95.

*Settlement of
1891-96. The
survey.*

Preparatory to the re-assessment, a general survey was undertaken. The survey made at the previous settlement by village patwāris could not be expected

to be accurate, while the necessary annual corrections had been neglected. The small scale revenue survey subsequently effected by the Imperial Survey Department was of course useless for purposes of re-settlement. It was thus necessary to re-survey the District on the scale of 16 inches to the mile. A preliminary traverse was made by the Survey of India Department which was completed in 1890, at a cost of Rs. 25 per square mile. In the meantime the cadastral field-to-field survey was commenced in 1889 under the superintendence of Mr. T. H. Dunne, Survey of India Department. Each patwāri was required to survey the

villages of his own circle, and constant checks were made by a special staff of Revenue Inspectors, working under Mr. Dunne. The work was of exceptional difficulty in the wild tracts of the Sātpurā hills, where the patwāris continually deserted. The whole survey, together with the preparation of the village land records, was completed by 1891, the total cost being Rs. 85,000 or about Rs. 31 to the square mile. In the autumn of 1891 Mr. F. G. Sly I.C.S. was posted to the District as Settlement Officer. His interesting report, to which this volume has frequently been indebted, gives a full and clear account of the subsequent operations.

212. The revision of the assessment was based on the soil-unit system now prescribed in the Central Provinces. The classification

^{The valuation of land.} of the soils and the factors ultimately determined are described in the chapter on Agriculture. Three guides were followed ; the results of crop experiments, the incidence of existing rent-rates, and the opinion of the cultivators. The experiments available were not sufficiently numerous, except in wheat land, to be of much value. An examination of existing rent-rates also gave but little assistance ; the rents paid by protected tenants varied almost as arbitrarily then as at the time of the thirty years' settlement, while more than one class of soil was usually included in each holding. The last guide thus proved by far the most valuable, and the determination of soil factors was for the most part based on local opinion. The ultimate basis of the valuation of land was a comparison between the payments of the various classes of tenants. It was considered that the average rise in the ordinary tenants' rent-rates fairly represented the rise in the value of land ; and that as that rise had been just about 100 per cent. during the currency of the settlement, it would be theoretically justifiable to double the payments of the protected tenants.

The desirability of approximating protected to unprotected rates was a further important consideration. It was seen that the advantage hitherto enjoyed by protected tenants had generally made foreil. It had resulted in their ouster and the purchase of their holdings by moneylenders ; it had encouraged sub-letting, which was widely prevalent, so that the actual cultivator received no protection at all ; it was unjust to the mālguzār, for it deprived him of a reasonable expansion of his income ; and it was unjust to the State, because it reduced the land revenue. An enhancement of 100 per cent., however, would have obviously been too severe, and the orders of Government issued on the preliminary tahsīl reports directed that an increase of 50 per cent. should be regarded as the maximum. At the same time, while unprotected rates were generally to be left as they were, a rectification of glaring inequalities in individual cases, which would usually take the form of reducing excessive rents, was clearly necessary. On these general principles the standard rate per soil unit was determined. But here again local conditions were not neglected. The District was divided into twenty-two assessment groups, and for each group a separate standard rate was fixed, with due regard to its position and natural features, the character of its villages, its communications and trade, the rise in prices, the area in cultivation and the character of the crops grown, the social condition of the mālguzārs and tenants, their indebtedness, and so on. Similar but more minute considerations were then applied to each village, according to which a village rate was also fixed. The majority of the standard rates were between 0·90 and 1·10 annas ; the highest was 1·20, while the lowest was 0·45 of an anna in the Bordhā group, which, however, does not afford a true basis for comparison, owing to the special method of its assessment. The sanctioned village rates varied between the wide limits of a minimum of 0·30 of an anna in a few wild jungle clearings, and a maximum of 1·50 annas in the rich heavily-rented villages of Hardā.

213. The valuation of the land at the sanctioned rates was entered in the ryotwāri abstracts and

The fixation of rents. assessment statement as the "deduced rental," that is, the rental value deduced

from the rates. This deduced rental is an accurate valuation of the land so far as the soil factors and rates have been accurately determined, but in the assessment it formed only the basis of the actual valuation. 'The deduced rental,' remarked Mr. Sly,¹ 'may be a fairly accurate measure of 'the rent-paying capacity of the land, but the assessment 'has also to be framed with reference to the capacity of the 'individual holding the land, who will have to pay the assess- 'ment ;' and he was at pains to form a separate judgment, backed by local knowledge, in every single case, and to prevent the fixation of rents from degenerating into a mechanical application of the deduced rental. Thus, in particular, to avoid large *per saltum* enhancements, the rents of protected tenants were usually not increased by more than one-third and so fell short of the deduced rental ; while, on the other hand, as the village rate was fixed with regard to the increase which it was advisable to make in the payments of protected tenants rather than to the actual value of the land, the rents of nine-tenths of the ordinary holdings were, even after reduction, higher than the deduced rental. It must be remembered too that, as the law stood then, the Settlement Officer had no power to reduce the rent of such holdings without the consent of the mālguzār ; and it required much careful explana-
tion to show them that it could not be to their true advantage to keep on the roll a rent incapable of regular realisation, upon which the Government assessment would be based and would have to be paid, whether the rent was realised or not. Mr. Sly was further deterred by the orders of the Local Adminis-
tration, received in the middle of the settlement, that reductions should be confined strictly to those rents which heavy debt or arrears clearly showed to be excessive. Thus many

¹ Settlement Report, para. 96.

high rents were allowed to stand, which, as the subsequent abatement proceedings unmistakably proved, would better have been reduced. The following table will show at a glance the effect of the revision on the average rates paid by different classes of tenants :—

Class of tenant.	Rent-rate per acre.			Rise in rate during period of settlement.	Enhancement imposed at revision.	Total rise over rates imposed at 30 years' settlement.
	At 30 years' settle- ment.	Prior to revision.	After revision.			
	R. A. P.	R. A. P.	R. A. P.	Per cent.	Per cent.	Per cent.
Absolute occupancy ..	0 15 6	1 0 2	1 5 1	4	30	36
Occupancy	0 15 4	1 0 3	1 3 5	6	19	26½
Ordinary	0 18 9	1 11 10	1 6 10	102	-18	66
All classes ..	0 14 11	1 4 0	1 5 1	34	5½	41½

In considering these figures it must be remembered that the class of soil cultivated by ordinary tenants is generally inferior to that of protected holdings, as is evidenced by the lower rate paid by them at the time of the thirty years' settlement. The small apparent increase of 4 per cent. in the rent-rate of absolute occupancy holdings is almost wholly due to changes in the area, and not to enhancement. Finally, it will be seen that the net result of enhancing the payments of protected tenants, and of reducing the payments of ordinary tenants, was to make an increase of only 5½ per cent. in the average rent-rate of all classes taken together. The rental revision was, in fact, an equalisation of rates rather than a general enhancement. Thus the all-round rate was only 41 per cent. higher than at the 30 years' settlement, as compared with a rise of 100 per cent. in prices; and out of this increase of 41 per cent., 34 per cent. had been imposed by the mālguzārs themselves, practically upon one class of tenant only.

214. No proper comparison could be made with the valuation of the holdings of plot-proprietors Plot-proprietors and privileged tenants, or *mālik-makbūzas* at the 30 years' settlement; for at that time only the area

which actually paid revenue was assessed, and the greater portion was held revenue free from the mālguzārs in lieu of a share in the village or for some other reason. At the re-settlement of 1891-96 the value of land so held was debited to the mālguzārs as against Government, and every *mālik-makbūra* plot was assessed. The valuation was deduced from the soil factors and the village rate, and worked out at an average of R. 1-7-9 per acre. Out of the valuation so deduced only 59 per cent. was taken as the actual revenue; the plot-proprietors were thus allowed 41 per cent. of the valuation in recognition of their position as proprietors, and not tenants. This revenue is collected by the mālguzārs as the agents of Government, and, in consideration of this service, a drawback varying from 10 to 20 per cent. of the assessment was allowed them. The area held by village servants and by tenants holding rent-free or at privileged rates from the proprietors was also valued at the deduced rent, the average being R. 1-5-5 per acre.

215. The *sir* or home-farm lands of the mālguzārs were

Valuation of mālguzārs' home farm. also valued on the same principles as were adopted for the fixation of tenants' rents. The ordinary village rate was

usually applied, and separate *sir* rates were only taken in 252 villages out of a total of 1445. The village rates were selected with special reference to the existing rental of the protected tenants, and were considerably below the true value of the village lands, as shown by the payments of ordinary tenants. The valuation of the home farm at the village rate was therefore a very great concession to the mālguzārs, extending to them the specially liberal treatment given by Government to protected tenants. The comparatively few villages in which a special rate was taken for the home farm in excess of the ryoti rate, were generally those in which it had been necessary to take an unusually low village rate in order to avoid too large an enhancement for protected tenants, while there was a substantial area held by ordinary tenants at a much higher rate. In no single case was a rate taken for

the home farm higher than that at which the ordinary tenants of the village held. In some villages much of the home-farm area is leased out to sub-tenants at high rates, much exceeding those paid even by ordinary tenants, but the valuation was not increased on that account. The fact that the area so leased fetched a rental of Rs. 85,000, but was only valued at Rs. 38,000, is sufficient proof of the leniency of the assessment. The total valuation fell at R. 1-8-2 per acre, as against the average tenant rate of R. 1-5-1. But the home-farm land is almost invariably the best in the village, and a greater proportion of it is situated in the plain than in the poor jungle villages, so that these rates afford no true basis for comparison. The real incidence of the home-farm valuation was lower than the tenant incidence.

216. In addition to the income received by a mālguzār from the cultivation of land by himself or his tenants, he obtains some profits from the forests, waste land, tanks and other sources. This miscellaneous income is known as *siwai*. It is not generally of much importance, but in the jungle villages it sometimes amounts to a substantial proportion of the assets. Its value was ascertained by questioning the landlords, examining their account books, if they produced any, and verifying their statements by reference to any official records available. The usual procedure was to call upon the mālguzār to state the amount of such income, and to accept his statement, unless it was manifestly unfair. The estimate of *siwai* income at the thirty years' settlement was Rs. 16,500, and had been most unequally assessed. The average annual income of the last few years was now fixed at Rs. 54,500, which made full allowance for all the items that were uncertain. In the actual valuation for assessment purposes, a large deduction was again made, and only Rs. 32,700 were taken. The fluctuating nature of this income was thus most liberally considered; and there can be no doubt that the estimate considerably understated the

Siwai or miscel-
laneous income.

real income. The principal items included were timber, mahuā, grass, firewood and other forest produce.

217. "Old fallow"—that is, land which has been fallow for three or more years—was not included Fallows and exemptions. in the cultivated area, and so was not assessed. But in holdings with an unnecessarily large proportion of old fallow, enhancement up to, but not exceeding, the deduced rent was freely made ; while existing rents in excess of the deduced rent were maintained. Such cases were common in the Hardā tahsīl, where it is customary for tenants to maintain private grazing grounds. Near large towns too a seller of milk takes land on rent for grazing purposes, and not for cultivation. Other somewhat more numerous cases occurred where a tenant of a plain village had taken a piece of land in a jungle village, with the object of grazing his cattle both on this land and on the common village grazing ground. Land on which grass is grown to be cut for hay was treated as land under crop, and not as old fallow. Land that had been fallow for less than three years was classified as being under cultivation, and was valued in the same way as land under crop. Due consideration, however, was shown in the assessment of holdings containing a large proportion of poor soil which cannot bear continuous cropping. Exemptions from assessment were allowed for improvements made since the preceding settlement ; for groves open to the public, from which no income was derived ; and for land used for growing grass for the cultivators' own cattle, and not for sale. Improvements of a durable nature were very few, including only the embankment of land and the construction of wells. The area of embanked land was only 2900 acres, and as the soil factor was the same as for unembanked land, no special exemption was necessary. Wells numbered 1313 in all, most of which had been constructed principally to give drinking water. The holders of groves had been given proprietary right at the thirty

years' settlement, as revenue-free grantees. Their status was maintained, while new groves fulfilling the necessary conditions were also exempted. Finally the concession in favour of grass reserves was substantial; for most mālguzārs and tenants cultivating large holdings keep a patch of land to grow hay for their cattle. The total exemptions under all the heads amounted to Rs. 26,000 on 24,000 acres.

218. The actual assets of the mālguzār or village proprietor thus include payments of plot-proprietors, tenants' rents, the valuation of the land held by himself and by privileged tenants, and the *siwai* income. The following table shows in full detail the assets as they stood before and after revision, and at the thirty years' settlement:—

		At 30 years' settlement	Before revision.	Aftor revision.
		Rs.	Rs.	Rs.
Payments of	Plot proprietors ...	8,306	8,564	18,221
	Absolute occupancy tenants.	3,77,580	3,14,920	4,11,130
	Occupancy tenants ...	1,36,655	3,11,278	3,71,430
	Ordinary tenants ...	2,25,812	5,12,917	4,21,296
Rental valuation of home farm and privileged holdings ...		2,25,775	4,64,185	4,64,185
Siwai income ...		16,473	32,693	32,693
TOTAL		9,90,601	16,44,557	17,18,955
Increase over preceding settlement		... } actual per cent.	6,53,956 +66	7,28,354 +74

Thus it will be seen that the operations of this settlement only added Rs. 74,398 to the assets, which gives the small increase of $4\frac{1}{2}$ per cent.; and, as compensation, the security of the assets was greatly improved by equalising to some extent the payments of all classes of tenants. During the interval between the framing of the assessment and its announcement some

small changes had to be made, and the amount on which the revenue demand was ultimately based, was Rs. 17,21,421.

219. The standard of assessment prescribed by the

The assessment of land revenue. Government of India was that the land revenue should ordinarily not be less than

50 or exceed 60 per cent. of the assets of the village. The determination of the standard fraction which could fairly be taken in this District was a problem of the utmost delicacy. The lenient assessment of the last settlement, and the unexampled prosperity that followed, have already been fully described. It was clear that Government was fairly entitled to a substantial portion of the increased assets ; and the small enhancement of the tenants' rental made it inevitable that the mālguzārs would have to bear the bulk of the burden. The point for determination, therefore, was what share of the increased profits could reasonably be demanded by Government without causing undue hardship. In particular, it had to be considered that the mālguzārs had for fifteen years been living up to, or even beyond, their large incomes ; and that a heavy enhancement of the revenue would mean a serious alteration in their mode of living, if not ruin. After due consideration of all the circumstances, the Settlement Officer decided that the standard fraction should be fixed at half-assets. As this was the lowest figure which was ordinarily admissible, little scope was left for the exercise of discretion in fixing the fractions for individual villages. Notwithstanding, to avoid excessive pressure, the standard, which was seldom higher than that figure, was often considerably lower in villages where the enhancement would otherwise have been unduly large, or the realisation of the revised assets seemed at all precarious. Thus the new assessment of the District ultimately absorbed only 48·7 per cent. of the assets, varying from 45 per cent. in the jungle group of Sohāgpur to 51 per cent. in the Sāngākherā group of Hoshangābad. Only 11 villages were assessed at over 55 per cent., while 52 villages were assessed at 40 per cent. or lower. The

total revenue thus assessed amounted to Rs. 8,38,000, an actual increase of Rs. 3,68,000, or 78 per cent., though owing to the extension of cultivation the actual revenue rate per acre was only raised from the $9\frac{1}{2}$ annas of the thirty years' settlement to 12 annas 7 pies, or by 32 per cent. Thus, in spite of every effort for leniency, the enhancement was undoubtedly heavy ; and as the net rental increase was only Rs. 65,000, it fell almost wholly on the mālguzārs. Mr. Sly calculated that it would reduce their incomes by 12 per cent. Under these circumstances, some system of progressive assessment might perhaps have been advisable, and this question was, in fact, raised by the Settlement Officer. The Government, however, decided that this proposal could only be considered on the basis that the amount foregone in the earlier years of the settlement should be made good later. The leading mālguzārs, who were consulted by Mr. Sly, refused to accept these terms, rightly pointing out that, in addition to the fact that there would be no real gain to them, the increased demand would form the basis of the next revision. A scheme of deferred enhancement was afterwards considered by Government. But as the assessments of the greater portion of the District had then already been framed and sanctioned at less than half-assets with the direct object of mitigating an immediate enhancement, and as these assessments had already been announced in two tahsils and part of a third without any signs of marked dissatisfaction, this scheme too was dropped. So the assessment stood ; and though involving a heavy enhancement, it was undoubtedly in itself most lenient. It has already been shown that it fell appreciably below the standard of half-assets. It was also but a small percentage of the value of the gross produce of the District, which was estimated by Mr. Sly as 160·67 lakhs. The revised rental including the rental value of mālguzārs' holdings, was thus 10·6 per cent., and the revised revenue 5·2 per cent. of the value of the gross produce.

220. The Hoshangābād tahsīl had been first assessed, and then Seoni, Sohāgpur and Hardā.

Announcement, duration and cost of the settlement.

The assessments were announced in the same order. The settlement was received, if not with enthusiasm, at least with resignation, as fair to all concerned ; and it is noticeable that appeals were very few. Originally intended to expire in 1907-09, it was extended in consequence of the troublous times that followed to 1915-18. The cost of the assessment was 1·33 lakhs, or Rs. 48-13-2 per square mile. The total cost of the settlement, including the traverse and the cadastral survey, was 2·86 lakhs, or Rs. 104-15-3 per square mile.

221. The revised revenue was never actually realised.

The abatement proceedings.

One of Mr. Sly's justifications for the heavy enhancement was the apparent stability of the general prosperity. In

particular, he had said, the freedom from famines in the past, owing to the constant rainfall and fertility of the soil, gave hopes of a similar freedom in the future. The Chief Commissioner, criticising the re-assessment in the light of after events, remarked : 'The results of the re-settlement of this District show the impossibility of relying too closely on arithmetical calculations in a matter which is so dependent on the seasons, and at the same time so much affected by the conditions of human nature, as the equitable fixation of land revenue.' The history of the disastrous years that followed will be found in the preceding chapter. It will be sufficient here to describe the abatement proceedings of 1900-01 which they necessitated. It was at first intended to make only a temporary reduction for three years, to compensate for deterioration in cropping. But further consideration showed the necessity of lowering for the term of settlement some of the high ordinary rents, which Mr. Sly had left untouched for the reasons already stated. At the same time, it was considered advisable to make some reduction in the valuation

of the home farm, to counter-balance the fall in rents. Some small relief was also given to protected tenants. A further temporary abatement on the permanently abated demand was sanctioned for the term of three years. Mr. C. E. Low I.C.S. was entrusted with the execution of these measures in the autumn of 1900, but he did not receive his final orders until March 1901. Notwithstanding, by the following July he had completely announced both the permanently and temporarily abated demand, and had also calculated remissions granted to a number of villages visited by a severe hailstorm in the same year. The permanent reduction in the mālguzāri assets amounted to Rs. 1,71,000. Out of this, more than Rs. 92,000 were subtracted from the payments of ordinary tenants, lowering their average rent-rate per acre from R. 1-6-10 to R. 1-0-11. The valuation of home farm and privileged holdings was reduced by over Rs. 67,000, while rather less than Rs. 12,000 represents the relief given to protected tenants. On the assets thus reduced, Mr. Low assessed revenue at the percentage of assets adopted in Mr. Sly's settlement. In this way the gross revenue demand was lowered from Rs. 8,38,000 to Rs. 7,56,000, a decrease of 10 per cent. The revenue thus revised fell at 11 annas 5 pies per cultivated acre, or only 20 per cent. higher than the $9\frac{1}{2}$ annas of the thirty years' settlement. The temporary abatements, which were to be in force for the three years 1900-01 to 1902-03, were intended to compensate for the contraction of the cropped area and the deterioration in the character of the cropping, pending the recovery of the District. They were calculated on the permanently reduced assets, and the average deduction was $18\frac{1}{2}$ per cent. of those assets. In this way the gross annual revenue demand was temporarily reduced by Rs. 2,18,000 below the settlement figure and by Rs. 1,36,000 below the permanently abated revenue. Corresponding reductions were made in the tenants' payments and in the valuation of the home farm and privileged holdings. Though the temporary abatement

was only intended to be in force for three years, in the case of 77 villages it was found necessary to extend this period over another year, while 7 more villages were granted yet a further reduction. A fresh enquiry into the condition of these 84 villages was then ordered, with the result that an additional permanent abatement for the remainder of the settlement was sanctioned in 72 of them, amounting in all to nearly Rs. 16,000. The total demand thus stood finally at Rs. 7,40,000, giving an increase of Rs. 2,70,000, or $57\frac{1}{2}$ per cent., over the revenue paid to Government at the close of the thirty years' settlement.

222. At the thirty years' settlement the following cesses were levied from the mālguzārs as

a percentage of the land revenue :—road cess at 2 per cent., school cess at 2 per cent., and post office cess at $\frac{1}{2}$ per cent., making $4\frac{1}{2}$ per cent. in all. In 1878, in consequence of the distress of that year, an additional rate of 2 per cent. was added as a kind of famine insurance fund. The same cesses were taken at the settlement of 1891-96, with the exception that the road cess was increased from 2 to 3 per cent. The rates fixed at the thirty years' settlement for payment to the patwāri, by mālguzār and tenant, varied from tahsīl to tahsīl and even in parts of the same tahsīl.¹ At the settlement of 1891-96 a uniform cess was fixed, at the rate of $3\frac{1}{2}$ per cent. of the revenue from proprietors, and 6 pies per rupee of rental from tenants. The cesses payable by mālguzārs at the settlement of 1891-96 thus amounted to 11 per cent. of the land revenue. The additional rate was, however, abolished from April 1st, 1905, and the patwāri cess from April 1st, 1906. The cost of the District post is also now met from Imperial revenues, but the post cess has been added to the road cess, raising it to $3\frac{1}{2}$ per cent. The total amount of cesses now payable by mālguzārs is thus $5\frac{1}{2}$ per cent. of the land revenue.

¹ For details, see para. 226.

223. Rights in land, as has been shown, were only created at the thirty years' settlement. Statistics of tenures. The present distribution according to tenure is compared in the following table with the distribution at the two last settlements:—

CLASS OF HOLDING.	AT 30 YEARS' SETTLEMENT.		AT SETTLEMENT OF 1891-96.		1905-06.		
	Area.	Percentage of total area.	Area.	Percentage of total area.	Area.	Percentage of total area.	
Village proprietors							
As sir	218,705	20·8	209,759	16·8	188,251	16·1	
As khudkāsh . . . . .	...	...	80,254	6·5	75,254	6·4
TOTAL	218,705	20·8	290,013	23·3	263,505	22·5	
Plot-proprietors	Mälik makbuzars	20,069	1·9	21,674	1·7	24,886	2·2
	Revenue-free grantees	5,149	·5	1,625	·1	1,304	·1
TOTAL	25,218	2·4	23,299	1·8	26,190	2·3	
Tenants	Absolute occupancy	390,599	37·1	312,449	25·1	283,812	24·3
	Occupancy	142,543	13·5	305,669	24·5	287,086	24·5
	Ordinary	261,992	24·9	294,747	23·7	289,700	24·8
	Holding rent-free for village service or on privileged terms	14,182	1·3	19,772	1·6	18,191	1·6
TOTAL	809,316	76·8	932,637	74·9	876,739	75·2	
GRAND TOTAL OCCUPIED AREA .	10,53,239	100	1,245,949	100	1,166,434	100	

During the currency of the thirty years' settlement the landlords absorbed a greater proportion of the increased cultivation than the tenants. For while a certain amount of *sir* was lost through being leased continuously without any reservation of right, a very considerable area was taken from tenants or broken up from waste. The landlords' holdings thus increased one-third, most of which occurred in the latter half of the settlement, when the large profits made from agriculture induced them to get possession of as much land as possible. The total area held by plot-proprietors changed but little,

although through lapse of their grants some of the holders became ordinary *mālik-makbūzas* instead of revenue-free grantees. The area held in tenant-right increased 15 per cent., but became a smaller proportion of the whole than it was at the time of settlement. Absolute occupancy tenants lost as much as 20 per cent. In the first few years a few, principally Gonds, abandoned their holdings, because they had not then appreciated their privileges ; but the bulk of the loss occurred later, and there can be no doubt that much of it was due to the desire of the mālguzār to get rid of a tenant who only paid a very light rent. The real losses of the original tenants were, of course, much greater ; for many of these holdings were purchased by moneylenders. On the other hand, the area cultivated in occupancy right more than doubled, so that the proportion of land held on protected tenures remained almost stationary. The automatic action of the rule of prescription was responsible for the bulk of this increase, and cases of purchase by ordinary tenants were very rare. In some cases, however, especially in Hardā, mālguzārs sold land with the occupancy status and a low rental at high prices to moneylenders and others desiring to sublet as an investment ; occasionally, too, some of the more astute made their relations occupancy tenants of holdings to prevent the acquisition of such rights by the real cultivator, who thus became a sub-tenant paying a heavy rent which did not appear in the assets of the village. The ordinary tenant area increased 12 per cent., but remained about the same proportion of the total occupied area. The actual land so possessed had, however, changed considerably ; much that was held in ordinary right at the time of the thirty years' settlement subsequently became occupancy by prescription, while most of the ordinary holdings at the settlement of 1891-96 consisted of land broken up from waste, or formerly belonging to protected tenants who had lost their rights. Relinquishments during the famine years were numerous, and, in spite of the recovery, the

occupied area in 1905-06 was 6 per cent. less than at the preceding settlement. Some allowance must, however, be made for the transfer of territory in 1904. The only class to show any increase are the *mālik-makbūras*, who have enlarged their area by 14 per cent. This is, again, partly due to the lapse of revenue-free grants, but principally to the correction of an error in the record of tenures made at the settlement of 1891-96, in which some persons holding land in lieu of a share in the village were entered as privileged tenants instead of proprietors. The landlords have lost proportionately more than the tenants, namely, 9 per cent. as against 6, which seems to indicate that the famines pressed rather more hardly on the landholding classes than on the cultivators, and at the same time created a not unnatural distaste for agriculture. It is somewhat surprising to find that the unprotected tenants have fared better than the protected. For while the contraction of the absolute occupancy and occupancy area amounts to 9 and 6 per cent. respectively, the ordinary tenants have only lost 2 per cent., and the proportion of the occupied area held by them has correspondingly increased. The reason for this is probably to be found in the heavy reduction made in the ordinary rentals at the abatement proceedings.

224. The whole of one and parts of two other jāgīrdāris lie within the District, covering a total area of 173 square miles. The settlement of these estates is described in the article on jāgirs in the Appendix. There are 124 villages in which superior and inferior proprietary rights co-exist, most of them belonging to the estates of the four Gond Rājās of Sohāgpur. There are 96 Government forest villages, covering 57,000 acres, of which about 11,000 acres are under cultivation. The area occupied by these villages has not been excised from the forest, and they are managed entirely by the Forest Department. The total collection of revenue amounts to nearly

¹ The figures given in this para, are for 1906-07.

Rs. 5,800. Twenty-one villages, containing about 1,500 acres of land, are held under the Waste Land rules. They pay some Rs. 100 as cesses. There are 35 ryotwāri villages, having a total area of 28,000 acres, of which 25,000 acres are classed as occupied and 3,000 acres as unoccupied. The land-revenue demand amounts to Rs. 6,000, and the cesses to Rs. 300. Some 40,000 acres consisting of villages or shares of villages, and 1,300 acres included in holdings, are held on *muāfi* or revenue-free tenure, the amount of revenue so assigned being Rs. 23,000. Out of this, villages or shares of villages covering nearly 26,000 acres, and nearly 1,000 acres of holdings, have been granted on *ubāri* tenure, that is, subject to the payment of a fixed share of the *kāmil-jamā* or assessed revenue. The revenue assigned under these tenures is nearly Rs. 13,000, while payment of Rs. 4,000 is demanded.

CHAPTER IX.

GENERAL ADMINISTRATION.

225. Prior to the thirty years' settlement the District was divided for administrative purposes

Administrative subdivisions and staff.

into 42 *tālukas*, a term which in this part of India had lost its proper Hindu-

stāni meaning of 'estate.' To avoid

such minute subdivisions, the *tālukas* were distributed at that settlement into six parganas, which, going from east to west, were named Rājwāra, Sohāgpur, Hoshangābād, Seoni, Hardā and Chārwa. This arrangement, however, was almost immediately superseded by the present division into tahsils. There are now four tahsils, namely, Sohāgpur, Hoshangābād, Seoni and Hardā. The Pachmarhi Sanitarium, though geographically part of the Sohāgpur tahsil, has a separate tahsildār. The subdivisional system is in force in the District, and there are three subdivisions, namely, Sohāgpur, which includes Pachmarhi, Hoshangābād and the tahsils of Hardā and Seoni, which together form one subdivisional unit. Hoshangābād is the headquarters of the Commissioner of the Nerbudda Division, but the head of the District is the Deputy Commissioner, who is also District Magistrate and District Registrar. Under him are four Assistant or Extra-Assistant Commissioners, three of whom are in charge of subdivisions, while the fourth is Treasury Officer and Magistrate at headquarters. One of the Assistants is generally a member of the Indian Civil Service. The headquarters of the Subdivisional Officer of the Hardā-Seoni subdivision are at Hardā, but of all other Assistants at Hoshangābād. From April to October, however, when the Pachmarhi dépôt is occupied, it is usual for an Assistant Commissioner to be posted there, in charge of the sanitarium. The Pachmarhi Cantonment

is administered by the Station Staff Officer, who acts as Cantonment Magistrate and Secretary under the Cantonment Act. For each tahsīl there is a tahsildār with the powers of a second class magistrate, and for all except Pachmarī a naib or assistant tahsildār. There are also benches of Honorary Magistrates, invested with second or third class powers, at Hoshangābād, Hardā, Sohāgpur and Seonī, to assist in the administration of criminal justice. The Divisional and Sessions Judge of the Nerbudda Division has his headquarters at Hoshangābād, and the civil judicial staff of the District ordinarily includes a District and two Subordinate Judges, and a munsiff at each tahsīl. The tahsildār of Pachmarī has also the powers of a munsiff, while all Subdivisional Officers and tahsildārs are invested with civil powers for the disposal of suits between landlords and tenants. Of the other departments in the District, the forests are controlled by a Divisional Forest Officer, who is usually a member of the Imperial Service. The Civil Surgeon, who is also Superintendent of the Jail, is ordinarily a commissioned officer of the Indian Medical Service, and has two Assistant Surgeons, stationed at Hoshangābād and Hardā, subordinate to him. A District Superintendent is in charge of the police. The District forms part of the Hoshangābād Public Works Division, and the Executive Engineer in charge has his headquarters at Hoshangābād. There are three Public Works subdivisions in the District, namely, Hoshangābād, Hardā, and Pachmarī. The Inspector of Schools of the Nerbudda Circle also has his headquarters at Hoshangābād. Deputy Inspectors of Schools are posted to Hoshangābād and Hardā.

226. The establishment of patwāris, or village accountants, who were originally village servants,¹ dates from very ancient times.

Land record staff.

¹ See para. 148.

Mr. (Sir C.) Elliott wrote in 1865 :¹ ‘Respecting the patwāri, ‘I have been unable to ascertain whether he was created in ‘the Marāthā time, or whether he existed even earlier, in the ‘Gond time; but I suspect the latter to be the case, since ‘the oldest man has never heard of even a tradition of ‘a time when patwāris were not. Many of them can ‘reckon four or five generations of service, and they were ‘more permanent than patels, who were constantly resigning ‘or being ousted. Of late they have been looked on rather ‘as Government servants than village servants, but I am not ‘sure if this feeling existed before our Government. It was ‘so general that in 1830 Captain Low, Assistant at Betūl, did ‘not enter the patwāri as one of the twelve village servants ‘at all. He is, however, considered in this District to belong ‘by rights to the number.’ The number of patwāris on the establishment, and their distribution, have varied considerably from time to time. Originally they appear each to have held two or three villages, and these were often scattered and wide apart. In 1861 the *halkābandī* or ‘circle’ system was introduced, but caused great dissatisfaction, and Mr. Elliott, at his settlement, as far as possible restored to each patwāri the villages which he had formerly held. The number of patwāris in the District was then 390, or one to every three and a quarter villages. At the settlement of 1891-96, Mr. Sly reduced the establishment to 289, or one to every five villages. Owing to subsequent alterations in the District boundary, the number now stands at 272. For supervision there are a District Superintendent of Land Records, an Assistant Superintendent, and 12 Revenue Inspectors. The headquarters of the Superintendent and Assistant Superintendent are at Hoshangābād, while the Revenue Inspectors are posted to Bankheri, Piparia and Semri in the Sohāgpur tahsil, to Bābai, Itārsi and Dolaria in the Hoshangābād tahsil, to Satwāsa and Pagdhāl in the Seoni tahsil, and to Timarnī, Rahatgaon,

¹ Settlement Report, Chapter III, para. 104.

Handia and Chārwa in the Hardā tahsil. Each Revenue Inspector has to supervise the work of 22 or 23 patwāris. The scale of pay of the patwāris has varied as much as their numbers and distribution. Originally their remuneration, like that of other village servants, was a levy of money, grain or service land from tenant and patel. Mr. Elliott thus describes the varying customs that prevailed at the time of the thirty years' settlement. 'In the Rājwāra 'pargana and the Sohāgpur tāluka, the patwāri generally 'gets half an anna on every rupee of rent paid by the 'cultivator, or about 3 per cent. on the rent-roll. In the 'rest of the Sohāgpur pargana, in Hoshangābād and Seonī, 'he gets 6 *kuros* or 48 *pai* (108 lbs.) of grain on every 'four-bullock plough, and half this on a two-bullock plough. 'The grain given is whatever is sown; if half the area be 'under *kharif*, then half the payment is in *kharif* grain, and 'so on. At present prices this is about Rs. 3 on Rs. 30 to 'Rs. 35 of rent, or from 8 to 13 per cent. on the rent-roll. 'In Hardā the patwāri gets as much as 8 *kuros* (144 lbs.) 'in some villages. This payment is called the *adao*, and is 'made in April from the threshing-floor. Besides this the 'patwāri generally visits the cultivator while sowing, and 'gets from him a *dhūli*, or basket of grain. This is called 'orī. He also gets little perquisites at a marriage, or 'when a child is born. From the mālguzār he receives the 'same as from the cultivator, if he has no land; but, except 'in the Hardā and Chārwa parganas, the patwāri everywhere 'has land—indeed, we forced the mālguzārs to give them 'land in old times.' No uniform rate of payment was fixed by Mr. Elliott at his settlement. The remuneration payable by mālguzār and tenant varied from tahsil to tahsil, and even in parts of the same tahsil. The mālguzār's payment sometimes took the form of a service holding free of rent, but in most villages it also included other dues. The rate paid by tenants was generally half an anna to the rupee of rental in the Sohāgpur tahsil, while in the rest of the

valley it was 6 *kuros* of grain per plough of land. In addition, patwāris used to get miscellaneous fees in accordance with the terms of the record of rights; such as *dāwat pūja*, for worshipping the ink bottle; *Dasahra-bhet* or gift at the Dasahra festival; and *sair kharch*, or cost of writing materials. A special inquiry was made into these dues in 1885, when the regular patwāri system was introduced, and their total value was estimated at Rs. 68,000 from tenants and Rs. 17,000 from mālguzārs. At the settlement of 1891-96, the patwāri cess was fixed at the rate of $3\frac{1}{2}$ per cent. of the land revenue from mālguzārs, and 6 pies per rupee of rental from tenants. The patwāri collected the tenants' payments direct, but the mālguzārs' dues were paid to Government and formed the patwāri fund. The total fund so realised in the District, as it is now constituted, was Rs. 24,000 in cash and Rs. 400 representing the rental value of service holding. The pay of each patwāri was fixed at a definite sum, varying from Rs. 120 to Rs. 190 per annum; in addition personal allowances, ranging from Rs. 5 to Rs. 80 per annum, were granted from the patwāri fund to about 100 deserving patwāris for the period of their tenure of their posts. This arrangement continued until 1906, when the cess was abolished, and the cost of the patwāri establishment was charged to provincial revenues. Patwāris now receive their salaries in quarterly cash payments at the tahsil treasury. Most of the patwāris of the District are Jijhotia or Nāramdeo Brāhmans, but a few Khedāwāl Brāhmans and Kāyasths are also to be found amongst them. They are generally intelligent and hardworking men. Their education and knowledge of land records give them a position in the village community which they rarely abuse.

227. Civil litigation is considerable. Suits affecting land are pursued with especial recklessness, and many landowners have been seriously embarrassed, if not ruined, by legal expen-

ses. Recent years have, however, shown a marked decrease in the number of suits instituted. In 1862 only 2000 suits were filed; but the annual number of institutions increased rapidly, and in 1877 had reached 8300. From then until 1896 the average was 7550. The years of scarcity limited the opportunities for litigation. In 1897, less than 5900 suits were instituted, and though in the following year the number rose again to 8000, the years 1899 to 1902 give an average of only 5500. In the two following years, however, debt conciliation proceedings swelled the total to 9000. Since then there has been a marked decrease in suits for money, arrears of rent, immoveable property, and mortgage suits. In 1905 the number of institutions fell to 6100, and in 1906 was still further reduced to 4300. In the Hardā tahsil especially litigation has noticeably diminished. Serious crime is not common, except in years of scarcity and famine. For the five years from 1902 to 1906 the number of cognizable cases sent up for trial averaged 490, but for the famine years of 1897 and 1900 the average was 1140. In 1897, indeed, more than 2100 persons were convicted for cattle-theft or house-breaking and 57 persons for dacoity. During the five years ending 1906 the average number of persons convicted for offences affecting human life was 8, for robbery and dacoity 2, and for grievous hurt 17. The District is almost free from professional criminals, but is exposed to occasional raids from the adjoining Native States. Opium and *gānja* smuggling over the long border is also very common and rarely detected. Cattle-thefts are comparatively frequent, especially in years of scarcity. Non-cognizable cases disposed of during the years 1902-06 averaged 690. Many of these were frivolous, a criminal complaint being often considered the proper complement to a civil suit.

228. The office of District Registrar is held by the Deputy Commissioner, who is authorised Registration. to delegate his powers to an Assistant. There are six registration offices. That of the District

Registrar is at Hoshangābād, while there is a sub-registration office at each tahsil headquarters, including Pachmarhi. A special salaried sub-registrar is appointed to each of these offices except Pachmarhi, where the tahsildār acts as sub-registrar in addition to his other duties. The number of documents registered in 1890-91 was 2900, while in 1900-01 it had diminished to 1750; in 1906 the number of registrations was only 1500. The total registration receipts in the corresponding years were Rs. 12,000 in 1890-91, Rs. 7,000 in 1900-01, and Rs. 7,000 in 1906.

229. The following statement shows the revenue realised in the District, under the principal heads of receipt, at the end of the last three decades and during the years 1905-06 and 1906-07.

Statistics of revenue.

	Land revenue.	Cesses.	Forests.	Excise.	Stamps.	Regis- tration.	Income- tax.	Other receipts.	Total.
1880-81	4,40,000	31,000	68,000	98,000	1,43,000	6,000	...	41,000	8,27,000
1890-91	4,92,000	41,000	1,07,000	1,59,000	2,11,000	12,000	38,000	44,000	11,04,000
1900-01	4,70,000	40,000	81,000	85,000	1,37,000	7,000	20,000	35,000	8,75,000
1905-06	6,84,000	68,000	90,000	1,44,000	1,26,000	6,000 ^a	15,000	39,000	11,70,000
1906-07	6,84,000	40,000	90,000	1,29,000	1,08,000	7,000 ^b	15,000	51,000	11,24,000

From 1-1-05 to 31-12-05.

From 1-1-06 to 31-12-06.

230. Prior to 1905 country liquor was supplied to the greater part of the Hoshangābād, Seoni Excise. and Hardā tahsils from a Sadar or central distillery at Hoshangābād, while the whole of Sohāgpur and outlying portions of the other tahsils were served by outstills. Under this system, the revenue was raised by a duty levied on the mahuā passed for distillation, and by the vend of shops and outstills. In 1905-06 the Madras

Contract Supply system was introduced, and a Sadar distillery was established at Hoshangābād, which supplies the three Districts of Hoshangābād, Nimār and Narsinghpur, and also part of Betūl. There are bonded warehouses at all tahsil headquarters, from which liquor is issued to licensed vendors. Revenue is raised partly by shop vend fees, and partly by a direct duty levied on liquor when it is issued from the bonded warehouse. All outstills have been abolished in the District, but their restoration in the wild hill tract of Borī is under consideration. The proportion of direct duty to vend fees is intended to be as 2 is to 1; but hitherto it has been about equal. It is difficult to compare satisfactorily the amount of revenue realised under the old and new systems. During the last years of the old system, the famines reduced the revenue from country liquor by about one half, while the new system is not yet firmly established. It may be noted, however, that during the five years ending 1895-96 the revenue from country liquor averaged annually Rs. 82,000 or 2½ annas per head of population, while in the first two years of the new system it averaged Rs. 84,000 or 3 annas per head of population. On the introduction of the new system the number of shops was reduced from 321 to 186, and further annual reductions are being regularly made. In 1906-07 there were 152 shops, or one to every 3000 persons and 24 square miles; or, excluding Government forest, one to every 18 square miles. Opium is now supplied wholesale to licensed vendors from Government treasuries and sub-treasuries under the signature of the Treasury Officer. In this District opium is usually eaten, but is also smoked in the preparation known as *madak*. The number of opium shops in the District in 1906-07 was 39, or one to every 11,000 persons and 95 square miles; or, excluding Government forest, one to every 70 square miles. The revenue, which includes duty and license fees, averaged Rs. 50,000 or 1½ annas per head of population during the five years ending 1895-96, while in 1906-07 it was

Rs. 42,000, giving the same incidence per head of population. During the intermediate period the revenue from this, as from all excisable articles, suffered heavily from the famines, and the figures give no true comparison. *Gānja*, which consists of the dried flowering tops of the cultivated female hemp plant and is ordinarily used for smoking, is obtained from the licensed cultivators in the Khandwā tahsil of the Nimār District. Licenses to purchase wholesale are given by the Deputy Commissioner without fee to all respectable applicants. The *gānja* is brought in bond from Khandwā to the tahsil headquarters and deposited in the bonded warehouse, whence it is issued on payment of duty to the retail licensees, who purchase it from the wholesale vendors. License fees are levied from the retail sellers, and the only other source of revenue is duty. In 1906-07, 51 licenses for the retail sale of *gānja* were issued, giving one to every 9000 persons and 73 square miles; or, excluding Government forest, one to every 54 square miles. The total revenue from *gānja* during the 5 years ending 1895-96 averaged Rs. 11,500, or 4 pies per head of population; in 1906-07 the revenue was the same, and the incidence per head of population was 5 pies. There has probably been some increase in *gānja* smoking of recent years, especially among forest tribes, as a result of the inaccessibility and enhanced price of country liquor under the Madras Contract Supply system. Other excisable articles are foreign liquor, *bhang*, or the dried leaves of the hemp plant, and *mājum*, which is a sweet confection made from *bhang* or *gānja*; but the revenue realised from them is inconsiderable. Licenses for selling *mājum* are only issued temporarily at the Holi festival, the season at which it is especially consumed. No licenses to tap *tāri*, or the sap of palm-trees, have been issued of late years, but this branch of excise is now being revived. The average incidence of excise revenue under all heads during the 5 years ending 1906-07 worked out at about 4 annas per head of population, which is considerably below the Provin-

cial average. This is an unavoidable consequence of the propinquity of the independent States of Central India and Makrai, where excisable articles are purchased at a much lower rate, and are either consumed there, or brought into the District in quantities too small to constitute an offence against the excise laws. The excise staff consists of an Inspector in charge of the District, 3 Sub-Inspectors in charge of the tahsīl bonded warehouses, 7 Sub-Inspectors in charge of the circles or ranges, into which the District is divided for purposes of supervision, and 22 peons. For the Sadar distillery at Hoshangābād there is an Inspector and a Sub-Inspector. The whole staff is subordinate to an Assistant or Extra-Assistant Commissioner, who represents the Deputy Commissioner in excise matters.

231. The management of rural schools, dispensaries,

veterinary dispensaries, pounds and minor

District Council roads with ferries on them, situated
and Local Boards. outside municipal areas, is entrusted to

a District Council with 12 elected and 6 nominated members. The average annual income of the District Council for the decade ending 1901 was Rs. 64,000, and the average annual expenditure for the same period was Rs. 66,000. Local rates and receipts from the cattle pounds and ferries were the principal items of income, while the bulk of the expenditure fell under the heads of education and civil works. Latterly both receipts and expenditure have increased considerably, and for the three years 1904-05 to 1906-07 averaged Rs. 89,000 and Rs. 90,000 respectively. The income has been enlarged by improved receipts from local rates, which in these three years averaged Rs. 38,000, and by more liberal contributions from Provincial revenues, which have risen from Rs. 5400 to Rs. 26,000. The extra expenditure has been principally under the heads of education and medical charges. The cost of education in these three years has averaged Rs. 34,000 and in 1906-07 was nearly Rs. 46,000. The amount spent on medical charges

has been nearly doubled, while the cost of the veterinary establishment is now Rs. 2000. Under the District Council are four Local Boards, each having jurisdiction over one tahsil. The Local Boards have no independent income, but do inspection duty and supervise minor improvements. The members are usually about 12 in number, of whom 3 are nominated and the remainder elected.

232. There are five municipal towns in the District, namely, Hoshangābād, Hardā, Seoni-Mālwa, Sohāgpur and Pachmarī. The Hoshangābād municipality has a population of 14,940 persons, and the committee consists of 15 members, of whom 6 are nominated and 9 elected. The average income for the decade ending 1901 was Rs. 28,600 and the expenditure Rs. 28,300. In 1906-07 income was Rs. 24,000 and expenditure Rs. 22,000, the incidence of income per head of population being R. 1-9-11 and of taxation R. 1-5-3. About two-thirds of the income is derived from octroi, while the conservancy tax produces about Rs. 2900. The chief items of expenditure are conservancy, upkeep of roads, education, and medical relief. The Hardā municipality had a population of 16,300 in 1901. Its committee consists of 4 nominated and 9 elected members. The average income and expenditure for the decade ending 1901 were Rs. 31,400 and Rs. 33,500 respectively. In 1906-07 income amounted to Rs. 41,500 and expenditure to Rs. 34,800; the incidence of income was Rs. 2-8-9 per head of population, and of taxation Rs. 2-0-3. More than half the income is derived from octroi. A water-rate has been levied since 1905-06, when the new waterworks were opened. The population of Seoni-Mālwa was 7531 in 1901. The average income and expenditure for the ten years ending 1901 was Rs. 11,000. In 1906-07 the income was Rs. 12,000, about half of which was derived from octroi. The Sohāgpur municipality had a population of 7420 in 1901. The annual receipts formerly averaged Rs. 10,000, but in 1906-07 had fallen to Rs. 9,000.

Octroi is the principal source of revenue. The population of Pachmarhi was returned in 1901 as 3020, but the native bazar is situated in the Cantonment. The area administered by the Municipal Committee includes only the residential quarters and a considerable tract of forest. The committee has 10 members, all of whom are Government servants appointed in virtue of their office. The income from taxation, which includes octroi and conservancy taxes is insignificant, but large grants are received annually from the Provincial funds for the upkeep and improvement of the plateau. Forest revenue, too, now amounts to more than Rs. 4000. Roads and general improvements, especially the prevention of erosion, absorb the bulk of the municipality's income. Conservancy and lighting are also considerable items of expenditure. The income for the decade ending 1901 averaged Rs. 3700, of which the proportion provided from the Provincial funds was Rs. 2000, while the corresponding expenditure averaged Rs. 3500. But latterly the figures have been much larger, and for the four years ending 1906-07 the average income has been Rs. 23,000, of which Rs. 17,000 were obtained from Government grants, while the corresponding expenditure has averaged Rs. 20,000. In addition to the municipalities, Itarsi was declared a "notified area" under section 169 of the Central Provinces Municipal Act in October 1905. Cattle registration fees are the principal source of income.

233. The Village Sanitation Act was formerly applied to Itarsi. But since 1905, when Itarsi was declared a "notified area," the Act has not been in force in any village of this District. Town funds for sanitary purposes have, however, been established at Babai and Rahatgaon, where cattle registration fees give a considerable income. Market dues are also levied at several large villages and are applied "for sanitation and other improvements in the village," according to the terms of the Record-of-rights.

234. The buildings in the charge of the Public Works Department are of considerable importance, numbering 52 in 1906-07, and representing a capital expenditure of nearly 12 lakhs, while the annual maintenance charges amount to Rs. 14,000. Many of them are at Pachmarī, including the Chief Commissioner's Residency, built in 1887-88 at a cost of Rs. 49,000, and the civil hospital and nurses' quarters, which were erected in 1905. At Hoshangābād the most important buildings are the Deputy Commissioner's court, built in 1856 at a cost of 1 lakh; the jail buildings, which were finally completed in 1872 and cost Rs. 70,000; and the High school, which was erected in 1895 at a cost of Rs. 24,000. The Bowie hospital was built in 1897 for Rs. 29,000. A large civil court is now under construction.

235. The sanctioned strength of the police force in 1906 was 505 officers and men, including Police. a District Superintendent, 2 Inspectors, 1 Sergeant, 13 Sub-Inspectors, 75 head-constables, and 413 constables; 1 head-constable and 9 constables were mounted. The whole force was engaged in the prevention and detection of crime, giving a proportion of one to every 7 square miles and 874 persons. The cost of maintenance in 1906 was Rs. 98,000. Recruiting is mainly local, but a few members of the force come from the United Provinces. The majority of the native police are Hindus, the proportion being nearly two Hindus to every Muhammadan. The number of Station-houses in the District in 1906 was 11, with 18 outposts subordinate to them. The railway police were separated from the District force in 1907, and are now subordinate to a separate Superintendent. The District police are to be re-organised in 1908, and will then include 3 Circle Inspectors and 23 Sub-Inspectors, with a revised scale of head-constables and constables, and a special armed reserve. There are also to be 16 Station-houses, and all

outposts are to be abolished, though posts for border patrols will still be maintained along the Bhopāl and Indore frontier.

236. The kotwār, or village watchman, generally called **Kotwārs.** chaukidār in other parts of India, is

properly speaking a village servant;¹ and though his present duties and responsibilities almost give him the status of a Government official, he still receives his pay from the village community direct. Mr. Elliott thus describes the kotwār's position at the time of the thirty years' settlement:² 'His police work used to consist in 'going rounds in the village (not in the fields), catching 'thieves, and taking them when caught to the *thāna* (or 'police Station-house), and doing general messenger's work, 'whence his name of Bulāhi or the caller. In the Rājwāra 'and Sohāgpur parganas he generally receives three *kuros* '(54 lbs.) per four-bullock plough, and six *kuros* in the 'remainder of the District. This is his *adao*, paid him at 'harvest time, and besides it he gets a basketful of seed-grain 'if he goes at sowing time.' In Hardā he often received a rent-free holding of about five acres of land. At the settlement of 1891-96, 1427 kotwārs were appointed for 1384 villages. The kotwār's *haq* or due was then fixed as a lump sum or a holding of service land from mālguzārs, and a contribution from tenants varying from 3 to 12 pies per rupee of rental. The total amount so realised was nearly Rs. 65,000, giving an average remuneration of about Rs. 45 per annum to each kotwār. In jungle villages, however, tenants often continue to pay the kotwār's due in grain instead of the prescribed cash payment. In 1906-07 the number of kotwārs in the District was 1352 for 1394 villages. Large villages frequently have more than one kotwār, while a single kotwār is often appointed for three or four small villages. The kotwārs in this District are weavers by trade, belonging to the Kotwār, Mehrā and Bulāhi

¹ See para. 148.

² Settlement Report, Chapter III, para. 106.

castes. The office is generally hereditary. The kotwār's chief duties are to assist the police in the prevention and detection of crime, and to maintain the vital statistics of the village.

237. There is a first class District jail in Hoshangābād under the management of the Civil Jail. Surgeon, with accommodation for 166

prisoners including 13 females. The daily average number of prisoners in the last five years has been : in 1902, 144; in 1903, 88; in 1904, 116; in 1905, 76; and in 1906, 71. The annual cost of maintenance per head varies from Rs. 78 to Rs. 120. The recognised industries of the jail are stone-breaking, aloe powdering, and also twine and rope-making ; oil-pressing has lately been discontinued. The road metal (*gitti*) is disposed of locally, and the aloe fibre is sold to a Calcutta firm. The profits on manufactures in 1906 were Rs. 635.

238. The District was for a long time very backward in education. Prior to 1854, indeed,

Education. there appears to have been no educational system at all ; and the only instructors were priests and Brāhmans, who were themselves exceptionally ignorant. Mr. Elliott, writing in 1865, remarked :¹ ‘The state of education in the District has till lately been exceedingly low. It is not peculiar to the District that hardly any cultivator can read or write, and that there is a prejudice among the class against book learning of any kind, as injurious to morals as to agricultural skill ; but I should think the number of mālguzārs who are unable to write or read would hardly be matched elsewhere. Even among the so-called Pandits there are very few indeed who know anything of Sanskrit, or can read the Purāns, or even who have the traditional knowledge of their own mythology, which is the common and inherited property of all Brāhmans, however unlearned, in Upper India.’ In 1854 the Saugor Educational circle of the

¹ Settlement Report, Chapter III, para 180.

North-West Provinces was formed, and Hoshangābād was included in it. A few village schools were established in the District, and in 1856 the Hardā and Seoni middle schools were opened. In 1862 the Education Department was constituted, and the number of schools rapidly increased. At the time of the thirty years' settlement it was estimated that there were 167 schools and 3,500 scholars. Many of these schools were built at the private expense of landholders. 'Zamindārs,' wrote Mr. Elliott,¹ 'are found to be very ready to come forward to build schools, with which their names will afterwards be connected; and in this way the buildings at Seoni, Sohāgpur, Bābai and Sobhāpur have been erected at the expense of single zamindārs. Before long no large town in the District will be without a substantial school-house.' The subsequent progress of education can be seen roughly from the following figures :—

Year.	No. of schools.	Average daily attendance.
1870-71	122	1,883
1880-81	85	2,576
1891-92	104	4,061
1900-01	147	5,020
1906-07	159	7,970

It is remarkable that in the years of prosperity which followed the thirty years' settlement, education made little or no advance. On the other hand, during the decade ending 1900-01, when in every other District of the Provinces school attendance was adversely affected by scarcity and famine, in Hoshangābād the average daily attendance increased by about 25 per cent. It would seem to be indicated that their unwonted prosperity had blinded the landowners and cultivators of Hoshangābād to the advantages of education. Female education shows no signs of any steady advance, and the number of female

¹ Settlement Report, Chapter III, para. 182.

scholars is so small that it is impossible to make any fair inference from fluctuations. During the five years ending 1906-07 the average daily attendance of female scholars was 465. There are a few mixed schools, to which both boys and girls go, but the majority attend separate girls' schools, which numbered 18 in 1906-07. The percentage of children under instruction to those of school-going age in 1906-07 was given as 33 for boys and 2½ for girls. The census returns show a marked increase in literacy : in 1881, 28 per mille of the total population were returned as literate ; in 1891, 38 per mille ; and in 1901, 46 per mille. The highest percentage of literacy was found amongst Jains, Christians and Muhammadans, who in 1901 averaged 227, 223 and 86 literates per mille respectively. Out of 719 female literates, 241 were Christians, representing a proportion of 188 per mille of female Christians. Anyone familiar with the District will have noticed the rapidity with which the rural population forget what they have learnt at school. A group of cultivators, most of whom had been to school, were discussing with the present writer the possibility of starting a co-operative bank, and it was found that the fourteen-year-old son of one of them was the only person capable of keeping accounts. The most important educational institution in the District is the Hoshangābād High school, which was founded in 1892, and affiliated to the Allahābād University in the following year. A hostel for boarders is attached. The results obtained by the school have hitherto been very good, and it ranks as one of the best in the Provinces. In 1906-07 the number of pupils enrolled was 393, while the average daily attendance was 270. There were altogether 21 schools for secondary education in the District in 1906-07, with an average daily attendance of 1865 males and 200 females. The expenditure on education rose from Rs. 29,000 in 1891-92 to Rs. 50,000 in 1901-02, Rs. 75,000 in 1903-04 and Rs. 1,23,000 in 1906-07. In the latter year Rs. 39,000 were contributed from Provincial funds, and

Rs. 61,000 from local funds, while Rs. 8000 were realised from fees, and Rs. 15,000 from other sources.

239. The public dispensaries include the Bowie hospital

Hospitals and
dispensaries.

at Hoshangābād, dispensaries at the three tahsil headquarters, and a hospital for Europeans and a dispensary at Pachmarī.

There is accommodation for 21 in-patients at the Bowie hospital, for 20 at Hardā, for 12 at Sohāgpur, and for 10 at Seoni. The Pachmarī hospital contains 5 beds, and the dispensary has indoor accommodation for 5. An Assistant Surgeon and a female hospital assistant are posted to Hoshangābād and Hardā. Hospital assistants are in charge of Seoni and Sohāgpur dispensaries. Pachmarī has a hospital assistant throughout the year, and from April to July a commissioned officer of the Indian Medical Service is also posted there. Of the other medical institutions in the District, the most important is the military hospital at Pachmarī, which is the sanitarium for the Jubbulpore Brigade. It contains 25 beds, and is in the charge of the Station Medical Officer, who is a commissioned officer of the R. A. M. C., usually of high rank. There is also a cantonment hospital for natives, with 8 beds, to which a military hospital assistant is attached. There is a police hospital at Hoshangābād, and a dispensary for outdoor relief only at Makrai, both of which are under the charge of hospital assistants. In addition, the Great Indian Peninsula Railway has dispensaries for outdoor patients at Sohāgpur and Hardā; and there are mission dispensaries at Hardā, where there is accommodation for 12 in-patients, and at Timarnī for outdoor relief alone. Formerly the Mission also maintained a leper asylum at Hardā, but this has been abolished. At the public dispensaries in 1906, 676 indoor and 64,472 outdoor patients were treated, the daily average being 32 and 334 respectively. The number of operations performed was 1654. The income of the public dispensaries is derived from Provincial and local funds and from subscriptions. The income during the

decade ending 1901 averaged Rs. 12,200, but in the three years 1904-06 the average rose to Rs. 20,500. The chief increase has been in the provision from Provincial funds.

240. Vaccination is compulsory in the municipalities of
Vaccination.

Hoshangābād, Hardā, Seoni and Sohāgpur and in the notified area of Itārsi; and operations are made throughout the District during the open season. The staff consisted in 1906 of a native Superintendent and 10 vaccinators, with one apprentice. The cost of the operations in 1906 was Rs. 2300, and the number of successful primary vaccinations effected was 11,000 on children under one year of age, or 95 per cent. of the number of children born less the number dying under one year of age, and 1300 on others. The number of successful re-vaccinations was 3500.

241. Veterinary dispensaries have been established

Veterinary dispensaries.

at Hoshangābād, Hardā and Pachmarhi. The veterinary assistants in charge are subordinate to the Director of Agriculture. Receipts in 1905-06 were Rs. 2600 and expenditure Rs. 3000, while the number of animals treated was 1500. The veterinary assistants tour throughout the District and attend important bazars, with the object of explaining to cultivators the proper method of treating cattle diseases.

APPENDIX.

GAZETTEER OF TAHSILS, TOWNS, IM-
PORTANT VILLAGES, RIVERS
AND HILLS.

APPENDIX.¹

GAZETTEER OF TAHSILS, JAGIRS, TOWNS, IMPORT- ANT VILLAGES, RIVERS AND HILLS.

Anhoni.—A small village in the Sohāgpur tahsil, 11 miles to the south-east of Sohāgpur and 3 miles west of the Piparia-Pachmarī road, lying at the edge of the outer range of the Mahādeo hills, which separates the Denwā from the Nerbudda valley. The village is insignificant in itself, containing only three or four houses, but near by, in a picturesque forest clearing, there is a hot spring having some local reputation as a cure for boils and itch. The water is sulphurous, and its highest recorded temperature is 115° in an air temperature of 68°. There are also two footprints of a devotee and an image of Mahādeo here. A small religious gathering collects on the festival of Ganesh Chaturthi; but nearly every day a congregation of well-to-do Hindus may be seen, their finery forming a curious contrast to the ragged aborigines who form the permanent population.

Aonlighat.—A *ghāt* or crossing on the Nerbudda, at its junction with the Hatarā, on the borders of the Seoni and Hoshangābād tahsils. A fair of some size is held here, on both sides of the Nerbudda, on the occasion of Somwati, that is, when the fifteenth day of the Hindu month falls on a Monday. The legend is that the Pāndava brothers came to Aonlighāt to bathe as soon as the fifteenth of the month fell on a Monday, but had to wait 12 years for

¹ Population figures are those of the census of 1901, unless the contrary is stated.

the desired day to arrive. They therefore cursed the day, saying that, as it took so long to come in the golden age, it should fall frequently in the evil age.

Babai.—A large village in the Hoshangābād tahsil, situated on the old Bombay road, 14 miles east of Hoshangābād. Population 4100. Bāgra railway station is 6 miles to the south-east and is connected by a metalled road. Bābai is the chief village of the old Bābai *tāluka*, which comprised the estate of a family of Brāhmaṇ Diwāns, who are still proprietors of this and many of the surrounding villages.¹ The grain market held here was formerly of importance, but has diminished since the opening of the railway. The weekly cattle market, however, which is held on Saturdays, is the second largest in the District, being only inferior to that of Itārsi. The number of cattle sold here in 1905-06 was 7000, realising 1½ lakh. A registration fee of 3 pies in the rupee is charged. A fee of 3 pies is also exacted from other shops as the kotwār's due. Several small industries flourish here, of which brass work is the chief; among others may be mentioned cloth printing and the manufacture of fireworks. For sanitary expenditure there is a town fund, derived from cattle registration fees, which in 1905-06 amounted to Rs. 2000. In 1907 the village roads were metalled by the managing committee. The water-supply is from wells, which number 36. The village has a vernacular middle school, a police Station-house, and a post office.

Bagra-Managaon.—A village in the Hoshangābād tahsil, 19 miles south-east of Hoshangābād, on the Great Indian Peninsula Railway, which has a station about a mile from the village. Population 900. The Tawā here issues from the Sātpurā hills, and is spanned by a fine railway bridge, 1147 feet in length, which was opened by the Duke of Edinburgh. The scenery is exceedingly picturesque,

¹ See para. 98.

Bimrost, Cilla, Derby.

BANDRABHAN FAIR.



and on a commanding hill to the south of the railway, on the right bank of the river, may be seen the ruins of an old fort, once the stronghold of a small Gond Rājā, of whose family no trace now remains. In the fort is a *dargāh* or shrine, beneath which two fingers of Sultān Hoshang Shāh Ghori, the traditional founder of Hoshangābād, are said to be buried. The village has a primary school. A small market is held on Sundays. The railway station exports a considerable quantity of grain from the country round Bābai, which lies 6 miles to the north-west. It is also an important dépôt for forest produce. Bāgra has been the scene of many mining ventures. Silver and lead mines have at different times been unsuccessfully exploited; but recent prospectings have revealed coal seams of better promise.¹ A tile factory was opened here in 1907, and produces tiles of excellent quality. The railway company has extensive gravel pits.

Bairi.—A village in the Hardā tahsil, 7 miles north-west of Hardā. Population 500. It is the chief village of the estate of the Korkū Thākurs of Bairī,² and the north-west portion of the tahsil is usually known as the Bairī tract. There is a big tank here, which was enlarged as a famine work in 1900, and a primary school.

Bandarabhan.—A small village in the Hoshangābād tahsil, situated at the confluence of the Tawā and the Ner-budda, 5 miles east of Hoshangābād. There is an old temple here, and an important fair is held at the full moon of Kārtik. Besides the sanctity naturally attaching to the confluence of two large rivers, Bāndarābhān is said to have acquired additional religious importance from the recitations of Pandit Jaganāth, who was once mālguzār of the adjoining village of Mālikherī and used to entertain the attendant pilgrims with readings from the sacred Bhāgvat. In 1904 an Agricultural and Industrial Exhibition was established

¹ See para. 182.

² See para. 100.

by the District authorities in connection with the fair, and prizes were given for the best exhibits. The movement has been very popular, and there is now a recognized annual gathering of Government officers and the leading men of the District, who meet here and discuss matters of mutual interest. Athletic sports for police, patwāris and school children, boat-races, amateur theatricals, fireworks, and occasionally a circus, contribute to the general amusement. The numbers attending the fair are now very large, being estimated at over 50,000 on the day of the full moon. Shops of every description collect, and transactions are considerable. The arrangements are in the hands of a committee, usually presided over by the Subdivisional Officer of Hoshangābād. Expenditure is met by donations from the Agricultural Department, District and municipal funds, and private subscriptions. In 1906 income and expenditure were about Rs. 2,500. The assemblage congregates in the broad river bed, and the scene at night, with the Vindhyan hills, which here descend to the water's edge, in the background, is very picturesque.

Bankheri.—A large and important village in the Sohāgpur tahsīl situated on the Great Indian Peninsula Railway, 23 miles east of Sohāgpur. Population 2,600. The superior proprietor is the Rājā of Fatehpur-Nadipurā. From its position, Bankheri is the chief commercial centre in the east of the tahsīl,¹ and a number of Mārwāri and Bhātia traders are established here. The rail-borne export trade is considerable, averaging, during the five years ending 1906, 110,000 maunds per annum, or nearly 5 per cent. of the total exports of the District. The chief articles of export are wheat and gram from the valley, and forest produce from the jāgirdāri forests to the south. Lac, which is grown largely by the Rajjhars of the Dudhi valley, and myrabolans are of special importance. There is a weekly market on Fridays, with an extensive sale for articles of food and

¹ See para. 169.

clothing and metal-work for ordinary use. There is also a small cattle market. Market dues, amounting to something over Rs. 100 annually, are levied by the superior proprietor to defray the cost of sanitation. The office of the Fatehpur-Nadīpurā estate is established here, and there is also an excellent garden, with a nursery for arboriculture, which was laid out when the estate was under Court of Wards management. There is a second grade vernacular middle school for boys, and two girls' schools, one of which belongs to the Friends' Mission, while the other has been started by the private enterprise of the richer inhabitants. Other institutions are a police Station-house, a branch post office, and a cattle pound. Bankheri is also the centre of a co-operative credit society.

Bariam-Pagara.—See **Jagirs.**

Bhadugaon.—A village in the Hardā tahsil, on the bank of the Ganjāl river, 7 miles to the south-east of Timarnī railway station. Population 800. There is a “Gaomukh” spring here, from which the waters of the river Tāpti are said to flow—a special provision for the benefit of a former devotee of Bhādugaon, who had been in the habit of going to the Tāpti to pray. The village has a primary school, and a weekly bazar is held on Tuesdays.

Bhameri Deo.—A small village with a population of about 100, situated in the Seoni tahsil, 5 miles east of Seoni. There is a shrine of Bhilat Bābā here, to which persons possessed with devils or suffering from snake-bite come to be cured. The shrine has an hereditary priest, called the Parihār, who is once a year possessed of Bhilat and utters prophecies. Pilgrims coming to consult the shrine present the Parihār with a cocoanut. A *rājalia*, or assistant, waits on him, and makes strings which are tied round the necks of persons suffering from possession to cure them. A fair is held here on the 15th of Chait Sudi (end of April), when offerings of cocoanuts are made to

Bhilat Bābā. About 5000 people usually collect, and shops are erected for the sale of brass vessels, toys and food.

Bhatgaon.—A large village in the Sohāgpur tahsil, 12 miles north of Sohāgpur, on the bank of the Nerbudda. Population 1500. It was formerly celebrated for its monkeys, but they have now been successfully expatriated, Bhatgaon is one of the chief villages of the Sobhāpur estate, containing a considerable area of *sīr* land. Rājā Umrao Shāh, the present proprietor, often resides here. There is a fine old *ghāt* or terrace on the bank of the Nerbudda, built by ancestors of Seth Tulsi Rām of Sobhāpur, but it has now fallen into hopeless ruin. A weekly bazar is held on Mondays. The village has a primary school, and a post office. On the opposite bank of the river, at Bāgalwāra, a large fair is held at the festival of Til Sankrānt in January.

Bhunnas.—A village in the Hardā tahsil, 7 miles north of Hardā. Population 700. It is the chief village of the younger branch of the Shukul family.¹ The mālguzār's house is large, and has an excellent garden. Country tiles of good local reputation are made here and exported all over the tahsil. The village has a primary school and a post office.

* **Bordha.**—An important village in the Hoshangābād tahsil, 16 miles south of Itārsi railway station and 5 miles west of the Itārsi-Betūl road. Population 800. It is the chief village of the Bordhā estate, and the residence of Sūbahdār Mangali Prasād, the present head of the Bordhā branch of the Sūbahdār family². A weekly market is held on Thursdays. The village has a primary school, a cattle pound and a post office.

Bori.—A small forest village in the extreme south of the Sohāgpur tahsil, 12 miles west of Pachmarhi. It gives

¹ See para. 98.

² See para. 98.

its name to the oldest and most important forest range in the District. The Borī range extends from the foot of the Pachmarī hills to the Tawā and Denwā rivers, and produces some of the finest teak wood and bamboos in the Provinces. The Borī river, which rises on the west face of Dhūpgarh, is the principal tributary of the Sonbhadrā.

Charwa.—A village in the Hardā tahsil, situated 5 miles to the south-east of Khirkīān railway station, with which it is connected by a metalled road. Its population is 1300. Lying on the old high road from Delhi to Burhān pur, Chārwa was formerly a place of some consideration and under native rule an official in charge of the *tāluka* was posted here. The old Fort, said to have been built about 1750 by Nāro Ballāl Bhuskute, who was in the service of the Peshwā, is still in good preservation, and is now utilised as a police Station-house. Several large wells with steps inside, called *baolis*, are evidence of the village's former prosperity. At the neighbouring hamlet of Haripurā, an old temple dedicated to Gupteshwar Mahādeo, was excavated some 20 years ago. A fair is held here at the festival of Shivrātri. Though much of its trade has been diverted to Khirkīān railway station, Chārwa is still of importance as the chief village of an extensive hill tract, and several mālguzārs, money-lenders and substantial traders reside here. Many of the surrounding villages are held in ryotwāri tenure. A large weekly market, held on Fridays, is frequented by the inhabitants of the Kālibhīt and Dāmjipurā tracts, as well as by the neighbouring villagers. A police Station-house, a cattle pound, a primary school and a post office are the public institutions. A co-operative credit society with its headquarters here was established in 1905; it is named after Gupteshwar Mahādeo, and an annual offering is made to the temple at Haripura. .

Chatarkhera.—A village in the Seoni tahsil, 2 miles north of Seoni, and close to Bānapurā railway station. Population 1000. The inhabitants are mostly Rājput cultiv-

ators, but there are a few houses of Balāhis, who weave *dhotīs*, *razais* and other articles with mill thread, while earthen pots of some local reputation are made by Kumhārs. There is a primary school for boys. A small fair is held on the second day of Chait Badi (April), in honour of Rāmji Bābā, the saint of Hoshangābād.

Chaurahet.—A large village in the Hoshangābād tahsil, 23 miles east of Hoshangābād, on the border of the Sohāgpur tahsil. Population 1500. The proprietors are Gūjars, whose ancestors are said to have acquired their estate from the Bhonsla Rājā as a reward for their skill in wrestling. A market is held here on Sundays. There is a primary school and a post office.

Chhater.—See Jagirs.

Chhidgaon.—A village in the Hardā tahsil, situated on the Great Indian Peninsula Railway, 15 miles east of Hardā, on the border of the Seoni tahsil. Population 1100. The railway station, which takes its name from the village, is in the Seoni tahsil. The Ganjāl and Moran rivers unite here, and the ford which is now crossed by a fine railway viaduct, was once a famous place for Thags, who, assuming the disguise of devotees, lay in wait here for passing travellers. The river bed supplies the railway company with stones for ballast. The curious hard blue stones known as “shāhjuri” on which the semblance of trees, the moon and other shapes appear, are also found here. Chhidgaon has a primary school and a post office.

Chhipabar.—A large and rich village in the Hardā tahsil, situated 2 miles south-east of Khirkiān railway station, on the Chārwa road, at the point where it is crossed by the old Bombay road. Population 1600. A large bazar is held here on Saturdays, at which country cloth, locally woven by kotwārs, is sold, as well as ordinary necessities. The village has a primary school.

Denwa River.—A river in the Sohāgpur tahsil, and a tributary of the Tawā. It rises near Pachmarhi, and, with

its tributary the Sonbhadrā, encircles the sandstone *massif* known as the Mahādeo hills. After flowing first southwards and then northwards, it turns due west near Matkuli, and makes its way down a valley between the Mahādeo hills and a low outer range, which cuts it off from the Nerbudda plains. It is joined by the Nāg Dewāli at Kukrā and the Sonbhadrā at Chormālni, and enters the Tawā at Rātakas. Its total length is 48 miles. Its floods are sudden and fierce, but soon subside. The bridge at Matkuli, where the Piparia-Pachmarī road crosses it, is not infrequently covered during the rains for a few hours at a time, but seldom for longer. Geologically, it has given its name to the Denwā group, which is one of the sections of the Upper Gondwāna rocks.

Dhandiwara.—A small village in the Seoni tahsil, miles south of Seoni town. It is famous for its red and white building stone, which is taken from a quarry situated on the borders of Dhāndiwāra, Mahuādhāna and Jamania. The quarry covers an area of 175 acres, and the annual outturn is between 20,000 and 30,000 cubic feet, most of which is purchased by the railway company. The professional quarrymen are Muhammadans from Saugor, while Gonds and Korkūs are engaged for the hard manual labour. It is estimated that five men can take out about 20 cubic feet of stone in a day.

Dolaria.—A large village in the Hoshangābād tahsil situated on the old Bombay road, 12 miles south-west of Hoshangābād. Population 1400. Dolaria Road station, on the Great Indian Peninsula Railway, is 1½ miles to the south, in the adjoining village of Semrī, and is connected by a feeder road. Grain exports are considerable. An important weekly bazar is held on Monday, at which a market due of one pice a shop is levied by the ~~mālūzār~~. The village has a small weaving industry. The chief institutions are a police Station-house, cattle pound, primary school and post office. There is a fine *baoli*, or well with steps inside, near the camping ground.

Dudhi River.—A river which rises in the Chhindwāra jāgirs, and flows into the Nerbudda near Umardhā. It is some 50 miles long, and for the greater part of its course acts as a boundary between the Hoshangābād and Nar-singhpur Districts.

Fatehpur.—A village in the Sohāgpur tahsil, important as the residence of the three Gond Rājās of Fatehpur.¹ It is situated 20 miles east of Sohāgpur, and 5½ miles south of Bankherī railway station, on the outer slope of the foot-hills of the Sātpurās, amidst beautiful forest scenery. The Anjan river, which flows past the village, runs north into the Nerbudda at Sāndia ghāt. The family of the Fatehpur Rājās is divided into three branches, each of which occupies a separate *muhallā*, or hamlet. To the west is Nadipurā or the hamlet by the river, and to the east Tekripurā or the hamlet on the hill, while between is Bichpurā or the middle hamlet. The three estates are distinguished by these names. The total population is 1300, most of whom live in the Bichpurā *muhallā*. The village area is nearly all covered with forest, and the cultivators have their holdings in the neighbouring villages. Each *muhallā* has its own weekly bazar, Bichpurā on Mondays, Nadipurā on Wednesdays, and Tekripurā on Saturdays; but transactions are now small. In former times, many merchants were attracted by the presence of the Rājās to make their headquarters at Fatchpur, which had then a considerable export trade in forest produce; but trade and merchants have now migrated to the important commercial village of Bankherī, which has the advantage of being situated on the railway. Tantia Topi, in his raid of 1858, passed through Fatehpur on his way from Sāndia ghāt to the Sātpurās, and was believed to have received some assistance from the Rājās, who fell into considerable disgrace. Fatehpur has a primary school and a branch post office.

¹ See para. 99.

Ganjal River.—A river which rises in the hills of Rājā-borāri and runs into the Nerbudda at Gondāgaon. Its length is 78 miles, and it divides the Hardā from the Seoni tahsil. At Chhidgaon, where it is crossed by the railway, it is joined by the Moran. It is a pleasant clear stream, flowing through rocky ravines. In its bed, between Chhidgaon and the Ner-budda, are found the curious hard stones called “shāhjuri,” on which trees, the moon and other shapes appear depicted.

Gondagaon.—A village in the Hardā tahsil, situated at the confluence of the Ganjāl, Gomti and Nerbudda rivers, 14 miles north of Timarnī railway station. Population 900. On a hill on the west side of the Gomti there is a Math, or convent of Gosains, presided over by a Mahant. Besides the little village of Birjākheri or Gangeshri, in which it is situated, the convent holds four revenue-free villages in Seoni tahsil, and two more in Indore, with which it has been endowed at various times by Sindhia, Holkar and the Saoli-garh Rājā. The convent estate was for long managed by the late Rai Bahādur Nirbhai Singh Mandloi of Shohpur, who died in 1907. A fair is celebrated at the Triveni, or confluence of the three rivers, whenever the 15th day of the month falls on a Monday. A weekly bazar is held on Thursdays. Gondāgaon has a cattle pound, primary school, post office, and a *sarai*, which was built by the ancestors of Seth Ganesh Dās of Timarnī.

Handia.—An old town on the bank of the Nerbudda, in the Hardā tahsil, 13 miles north of Hardā, with which it is connected by a metalled road. Its population is now 1900. Handia is in many ways the most interesting place in the District. It traces its history back to mythological times, when the interview between Jamadagni and Sahas-rārjun, the Rājā of the Thousand Hands, is said to have taken place near by. Its name is derived from Nazir-ud-din, king of Balk, who settled here as a *fakir* and was known as Handia Shāh Bulang. The cave in which he lived was

said to communicate with Mecca; marked by a small sacred stone, it is still maintained by a grant. In historical times, Handia owed its importance to its position at the ford of the Nerbudda on the high road from Delhi to the Deccan, and under Mughal rule seems to have been a place of considerable size. Remains on the surrounding hills bear witness to its extent, and the neighbouring villages are said to have been once *mohallas* or hamlets of the old town. Thus Kanjargaon was the Kanjars' quarter, Kolipurā the Kolis', Gaolon the Gaolis', and Hirapur the Sarāfs.' Handia first appears historically in the annals of Hoshang Shāh Ghori, King of Mālwā at the beginning of the 15th century; he is said to have begun and finished the three forts of Hoshangābād, Handia and Jogā in a single day. In the Ain-i-Akbarī, Handia is mentioned as a Sarkār in the Sūbah of Mālwā, remarkable for its wild elephants. It was the residence of a Faujdār and Diwān, who held the surrounding country for the Mughals. The best known of these Faujdārs are Jalāl Khān Kankar and his brother Zabardast Khān, who flourished at the end of Aurangzeb's reign. Even before the fall of the Mughal power, the opening of the direct road from Mhow to Burhānpur had diminished the importance of Handia; and soon after the Marāthā conquest of this tract, in the middle of the 18th century, the seat of Government was transferred to Hārdā. Thereafter Handia rapidly declined. The remains still to be seen here are not without interest. The bulk of Hoshang Shāh's fort has been converted into railway ballast. But besides the cave of Handia Shāh Bulang already mentioned, there still exists the tomb of Akbar's Wazīr, Abdullā Hasan, the author of "The Mullā Dopiazā," which has not yet lost its reputation as a humorous work. About 1½ miles from the present town are the remains of the houses built by the brothers Jalāl Khān Kankar and Zabardast Khān, who are said to have fought together all day and dined together all night. To the south, on the road to Hirapur, is a ruined *sarai*, known as the Teli

sarai, which was built by a successful Teli banker for the accommodation of his customers. Across the river is a more imposing structure, the Siddhanāth temple, containing an image of Siva. Built of carved stone, in a conical shape, it is said to be the work of the gods. In proof of this (so the legend runs), when Aurangzeb threatened to destroy it, the temple, which, as is usual with Hindu temples, faced eastwards, turned round at the prayer of the Pandits and faced towards Mecca. Be that as it may, Aurangzeb was prevailed on to spare the temple, after placing over the door four tigers, the sign of a Muhammadan mosque, to indicate his mastery. A large fair is held here at the festival of Shivrātri. Handia is considered to be the centre point of the Nerbudda, and pilgrims, who perform the *pradakshina* or complete circuit of the river, often begin from here. At the present day, Handia is of some importance as a halting place on the trade route from Indore to Hardā, but does not itself maintain any industries of much importance. The brass work, however, made here by the Kaserās, has a good reputation, and is regularly sent to Hardā for sale, as well as to fairs in the surrounding country. Another industry is the manufacture of mortars from a bluish stone called "pathonia." Handia possesses primary schools for both boys and girls, a police Station-house, a cattle pound and a post office. It is a survival of Mughal rule that many of the cultivators here are Muhammadans.

Harda Tahsil.—The western tahsil of the District, lying between $21^{\circ} 53'$ and $22^{\circ} 35'$ N. General description. and $76^{\circ} 47'$ and $77^{\circ} 31'$ E. In 1901 it was the largest tahsil in the District, its area being 1483 square miles, but this was reduced by the transfer of the Kālibhīt tract to Nimār in 1904 to 1139 square miles, or rather less than one-third of the area of the District. The population in 1901 was returned as 131,438, and allowing for the transfer of territory above mentioned, it now stands at 128,858 or 29 per cent. of the District

total. The density of population is thus 113 to the square mile. In 1891 and 1881 the population was 143,839 and 146,782 respectively, but owing to the frequent alterations that have been made in the tahsil boundary,¹ these figures afford no true comparison. The twofold division into hill and valley, which is characteristic of the District as a whole, is for the most part true of this tahsil. The northern portion lies in the valley of the Nerbudda river, and consists of a level plain of rich black soil, which is of great depth and fertility and is fully cultivated. To the south is the Rājāborāri group of the Sātpurā hills, a forest tract, interspersed with scattered patches of cultivation. In the north-west of the tahsil, however, spurs of the Vindhyan mountains are found south of the Nerbudda, and the fertile plain of the valley gives place to the low forest-clad ranges of the Bairī hills. In the south-west of the tahsil lies the Feudatory State of Makrai, and beyond it is the hilly Chārwa tract, which contains the principal ryotwāri estate in the District. Hardā is the only town in the tahsil, Handia, the old capital, having now lost its former size and importance. The tahsil contains 491 villages. Of these Timarnī is by far the largest, no other village having a population of 2,000, though 13 exceed 1,000.

The system of agriculture is generally more efficient than that pursued in the rest of the Agriculture. District. The ploughs used are heavier,

the plough-cattle are stronger, and ploughings are more frequent. Some of the superiority of Hardā agriculture may also, perhaps, be ascribed to differences of soil and rainfall. Wheat is sown in the proportion of 1 *pakkā māni* (864 lbs.) to 10 acres, which is less than is customary elsewhere. The outturn, however, is not inferior. Similarly, the area served by a plough of four cattle is here 30 acres, as against 25 acres elsewhere. Special attention is paid to

¹ See para. 4

cotton, and it and other superior autumn crops are sown in lines with a drill. Of the total area of the tahsil, in 1905-06, 279 square miles or 25 per cent. were under Government forest, comprised in the Rājāborāri range, while 162 square miles were covered by tree forest, scrub jungle and grass in private hands. A total of 401,000 acres or 74 per cent. of the village area was occupied for cultivation, and 309,000 acres were under crop. The statistics of the principal crops in recent years are shown in the following statement :—

Year.	Wheat.	Gram.	Kodon Kutki.	Juar.	Tur.	Til.	Cotton.	Total cropped area.
Settlement of 1891-96	253,926	5505	17,144		12,286	4714	Not available	383,083
1900-1	189,845	20,411	3,778	34,176	10,804	23,486	19,214	292,000
1904-5	178,239	15,400	2,891	4,102	8,138	27,828	83,505	305,467
1905-6	177,748	13,842	2,505	5,410	8,047	21,804	41,809	309,952

The land revenue demand at the thirty years' settlement was Rs. 1·47 lakhs, and fell at 46 per Land revenue. cent. of the assets. It was raised at the settlement of 1891-96 to Rs. 3·12 lakhs, giving an increase of Rs. 1·53 lakhs or 96 per cent. on the revenue immediately prior to revision. The revised revenue fell at 49 per cent. of the assets, which amounted to Rs. 6·35 lakhs. The cash rental increased from Rs. 2·42 to Rs. 4·54 lakhs. The demand for land revenue and cesses in 1905-06 was Rs. 2·35 lakhs.¹ The following assessment groups were formed at the settlement of 1891-96, the number of villages contained in each being shown in brackets :— Pokharnī (110), Timarnī (107), Bhādugaon (31), Bairī (83), and Chārwa (113). In addition to these there were the Bālri and Dāmjipurā groups, which have now been transferred to Nimār with part of the Chārwa group. The average rent-rate per acre for the tahsil was R. 1-5-7, as against R. 0-14-2 at the thirty years' settlement, while the revenue rate was

¹ Transfers of territory and abatements are responsible for the decrease.

R. 0-12-7. The Bhādugaon group with R. 1-9-3 per acre has the highest rent-rate, the others being Pokharnī R. 1-8-10, Timarnī R. 1-8-6, Bairi R. 1-2-10 and Chārwa R. 1-2-2.

The tahsil is divided into four Revenue Inspectors' *Miscellaneous.* circles with headquarters at Timarnī Rahatgaon, Handia and Chārwa, and 90 patwāris' circles. It has five police Station-houses, at Hardā, Handiā, Timarnī, Rahatgaon and Chārwa.

Harda Town.—The headquarters town of the Hardā *General description.* tahsil, situated in $22^{\circ} 21' N.$ and $77^{\circ} 6' E.$, on the Great Indian Peninsula Railway, 416 miles from Bombay, and 58 miles from Hoshangābād by rail viâ Itārsi. The old Bombay road runs from here direct to Hoshangābād, which lies 53 miles to the north-west. Hardā contains three separate villages, namely Hardā Khās, Kulhardā, and Kheripurā. The total area is 3,058 acres, but the *nazūl* or Government land is insignificant. The remainder is the property of the mālguzārs of the three villages which make up the town. In point of population Hardā is the largest town in the District, and the tenth in the Provinces; it has developed rapidly in the last thirty years, increasing from 9,170 in 1872 to 16,300 in 1901. The town was created a municipality in 1869. Details of its administration will be found in Chapter IX. The chief municipal work hitherto undertaken is the waterworks on the Ajnāl river about a mile from the town. These works were carried out in 1905 at a cost of Rs. 74,000; but additional expenditure estimated at Rs. 1,20,000 is required to complete them. Street-lighting was introduced in 1906, and a new drainage scheme has been surveyed. Besides being a tahsil station, Hardā is also the headquarters of an Assistant or Extra-Assistant Commissioner, in charge of the Hardā and Seoni subdivision. Many mālguzārs of the surrounding tract, chiefly Brāhmans live here, a survival

of the times when Hardā was the residence of a Marāthā *amīl*.

Hardā dates its importance from the Marāthā conquest, when it superseded the old ^{Historical.} Muhammadan town of Handia as the capital of the Hardā-Handia tract and became the residence of a Marāthā *amīl*. About the end of the 18th century, this tract was transferred from the rule of the Peshwā to that of Sindhia. In 1801 Hardā was sacked by Yashwant Rao Holkar. Later, during the period of the Pindāri raids, Hardā was exposed not only to the assaults of the Pindāris, but to the depredations of Korkū tribes inhabiting the Bairī hills. In the operations of 1817, it was made the headquarters of Sir John Malcolm's division. The Hardā tract was not ceded with the rest of the District in 1818, but remained in Sindhia's dominions until 1844, when it was made over as part payment for the Gwalior contingent. During the Mutiny, Hardā was the scene of some disturbances, which enabled the Deputy Magistrate, Maulvi Mazhar-ul-Jamil, to prove his worth and earn for himself a *jāgīr* in Damoh.¹ His tomb at Hardā, for the upkeep of which an annual grant is made, is still much revered. In 1860 the cession was made absolute, and Hardā entered on a period of great prosperity. The name of Mr. J. Beddy, who was appointed Assistant Superintendent of the Hardā subdivision in 1859 and continued in that position for many years, will always be remembered in connection with the town's development.

^{Trade and local industries.} Hardā is well situated as a trading centre. The metalled road to Handia makes it the railway station for a large tract of

Indore, while roads from almost every direction here converge. Both in export and in import, Hardā is only rivalled by Itārsi among the railway stations of the District. Statistics of rail-borne traffic for the five years ending 1906 show that the annual average

¹ See para. 41.

export was 528,000 maunds or 22 per cent. of the District total, while the corresponding import was 259,000 maunds or 27½ per cent. of the District total. The principal article of export is wheat, for which the chief agency is Messrs. Ralli Brothers. The cotton-trade, however, is now of some importance, and in 1907 Hardā possessed 6 ginning factories and 2 pressing mills, which received raw cotton from all parts of the District and from Central India, and exported it to Bombay after preparation. Oilseeds are also sent to Bombay in considerable quantities. Local industries include weaving, dyeing, brass and tin work, and the manufacture of boots and caps. There is a large weekly market on Tuesdays. Among the articles brought for sale may be mentioned the brass work of Handia, rough carpets, and *niwār* tape for beds. A printing press, with English and Hindi type, has been established. A considerable amount of labour is employed in the workshops of the Great Indian Peninsula railway; which has a Resident Engineer at present posted here, it is proposed, however, to remove the railway staff to Itārsi.

Hardā is well supplied with schools. Under the municipality there is an Anglo-vernacular middle school, with three branches, Hindi, Marāthī and Urdu; it is now located in the Carey school, which was built at a cost of Rs. 18,000 and opened by Mr. L. S. Carey I.C.S., Commissioner of the Division, in December 1906. The Christian mission supports four schools, namely, a high school, affiliated to the Allahābād University, an anglo-vernacular middle school, with Hindi and Urdu branches, a primary school for boys of low caste, and a primary school for girls. In addition there is a Church school for Europeans, while the Muhammadan Anjuman Islāmia maintains a primary school for girls. Dispensaries are almost equally numerous. Besides the Government dispensary, which is in the charge of an Assistant Surgeon, dispensaries are maintained by the railway company and the Christian mission, while there are three private medical establishments.

There is also a Government Veterinary dispensary. A leper asylum was formerly maintained by the mission, but has now been abolished. The principal public buildings are the tahsil offices and Subdivisional Officer's court, the town hall, which was built in 1889 out of municipal funds, the English church, the bonded warehouse for liquor and *gānja*, the police Station-house, dâk bungalow, and post and telegraph offices. An urban bank, on the principles of co-operative credit, was established here in 1905.

Hatwans.—A good village in the Sohâgpur tahsil, one mile north of Piparia railway station, at the junction of the Sândia and Sobhâpur roads. Population 1200. There is a shrine here dedicated to Râmjî Bâbâ, the Saint of Raipur, and a small fair is celebrated in his honour in Chait. A weekly market is held on Thursdays. The village has a primary school.

Hirankhera.—A village of the Seoni tahsil, 10 miles north-east of Seoni town. Population 1100. A weekly market is held on Saturdays, which, after Shohpur market, is the largest in the tahsil, and is attended by many people from the Hoshangâbâd tahsil. The village has a primary school and a post office.

Hoshangabad Tahsil.—The headquarters tahsil of the District, lying between 22° 18' and 22° 52' N., and 77° 30' and 78° 5' E. Its area is 804 square miles, or rather more than one-fifth of the whole District. Its population in 1901 was 125,071, or 28 per cent. of that of the District. In 1891 it was 137,811, and in 1881, 152,182. The population is denser here than in any other tahsil, being 156 to the square mile. The tahsil is divided into two well-marked tracts. On the north is the Nerbudda Valley, a level open black soil plain with a gentle slope from the Sâtpurâ hills to the Nerbudda river; while to the south, beyond the intervening ridge of

which the prominent peak Sirideo is the principal height, stretches the light sandy plateau of Bordhā. There is a great contrast between these two tracts. Along the bank of the Nerbudda, indeed, where the land is much cut up by ravines, or, again, where the Tawā and other rivers have brought down large deposits of sand, strips of poor cultivation will be found; but, generally speaking, the valley is an unbroken plain of rich deep black soil, almost wholly devoted to the cultivation of wheat. On the other hand, the light sandy soil of the Bordhā plateau grows little but poor autumn crops, and except in a few pockets of inferior black soil scarcely a field of wheat is to be seen. The tahsil contains two towns, Hoshangābād and Itārsi, and 335 villages; of these Bābai, Sāngākherā Kalān and Raipur are the largest, and there are 12 others with a population of over 1000.

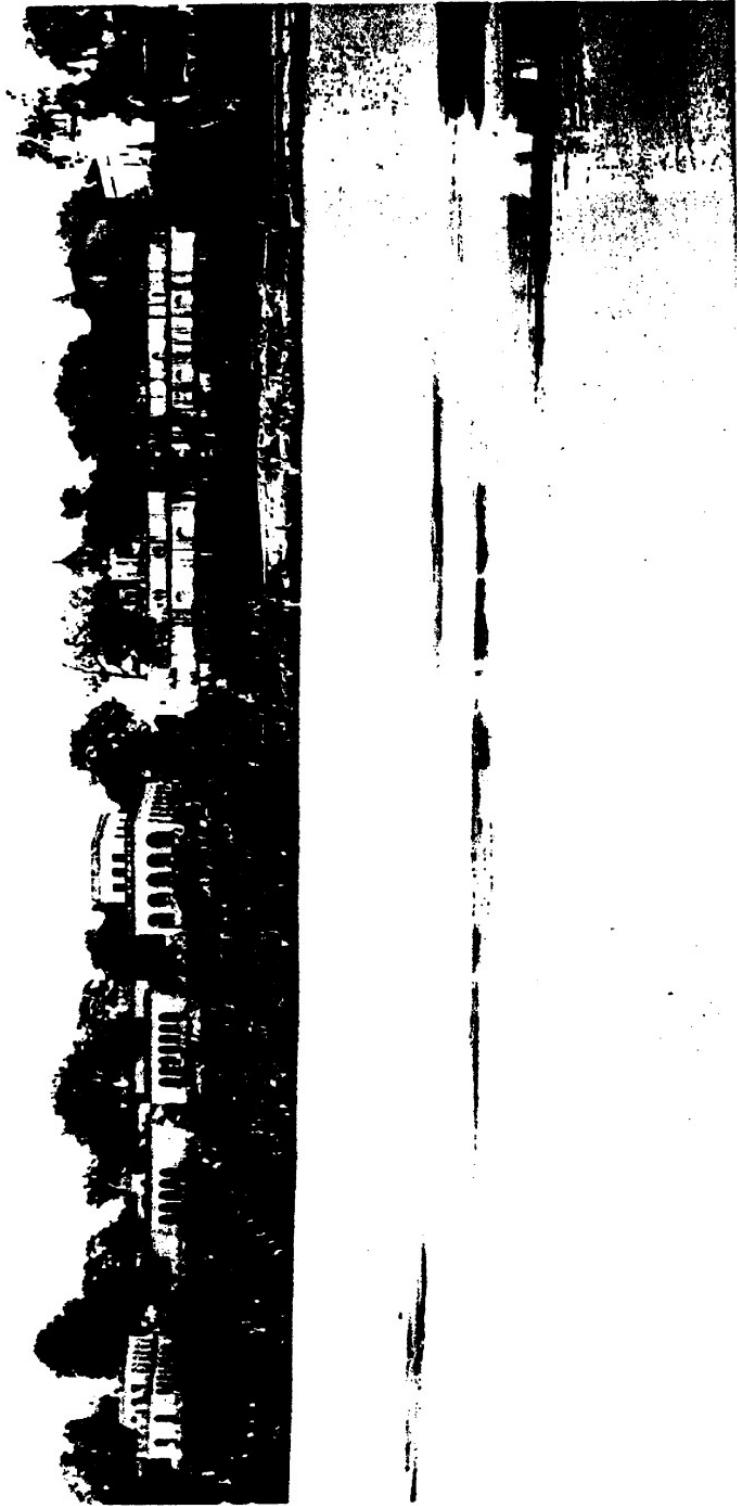
The methods of cultivation are those of the District, Agriculture, and being fully described in Chapter IV, need not be repeated here.

Of the total area of the tahsil, in 1905-06, 84 square miles or 10 per cent. were under Government forest, included in the Hoshangābād range, while 185 square miles were covered by tree forest, scrub jungle and grass in private hands. A total of 285,000 acres or 65 per cent. of the village area was occupied for cultivation, and 211,000 acres were under crop. The statistics of cropping for the principal crops in recent years are shown in the following statement:—

Year.	Wheat.	Gram.	Kodon-Kutki.	Juār.	Tōr.	Til.	Cotton.	Total cropped area.
Settlement of 1891-96	154,756	13,887	12,269	10,749		21,879	Not available.	277,526
1900-01	49,894	35,042	17,890	22,148	6,100	16,948	4,613	188,109
1904-05	84,857	32,081	19,396	12,066	8,758	18,846	6,763	209,701
1905-06	89,907	27,837	20,242	11,826	5,689	19,856	6,977	211,410

Benares, C.ii.0 , Derby.

TEMPLES AND TERRACES ON THE NERBUDDA, HOSHANGABAD.



Land revenue. At the thirty years' settlement the land revenue was Rs. 1·48 lakhs, which fell at 47 per cent. of the assets. It was raised at the settlement of 1891-96 to Rs. 2·44 lakhs, giving an increase of Rs. 96,000 or 65 per cent. on the revenue immediately prior to revision. The revised revenue fell at 49 per cent. of the assets, which were estimated at Rs. 4·95 lakhs. The cash rental increased from Rs. 2·34 to Rs. 3·36 lakhs. The demand for land revenue and cesses in 1905-06 was Rs. 1·87 lakhs¹. At the settlement of 1891-96 the following assessment groups were formed, the number of villages contained in each being shown in brackets against it:—Bābai (55), Sāngakherā (53), the Nerbudda group² (41), Raisalpur (59), Khaparia² (58), Zamāni²(62) and Bordhā (42). The average rent-rate per acre for the tahsil was R. 1-5-4, as against R. 0-15-9 at the thirty years' settlement, and the revenue rate was R. 0-12-9. The rent-rate of the Raisalpur group, which was the second highest in the District, was R. 1-10-2 and next came Khaparia with R. 1-9-7, Bābai R. 1-7-4, Sāngakherā R. 1-6-8, Nerbudda R. 1-2-2, Zamāni R. 1-1-0, and Bordhā R. 0-5-1.

Miscellaneous. The tahsil is divided into three Revenue Inspectors' circles with headquarters at Dolaria, Itārsi, and Bābai, and 76 patwāris' circles. It has five police Station-houses, at Hoshangābād, Itārsi, Bābai, Keslā and Dolaria.

Hoshangabad Town.—The headquarters town of the Nerbudda division and Hoshangābād District, situated in 22° 46' N. and 77° 44' E. on the Midland section of the Great Indian Peninsula Railway, 11 miles from Itārsi junction and 474 miles from Bombay. The town is picturesquely situated along the

¹ The decrease is due to the readjustment of the Seoni and Hoshangābād tahsil boundaries and the abatements.

² These groups all include villages which have now been transferred to the Seoni tahsil.

southern bank of the Nerbudda river, beyond which, at a distance of about 2 miles, rise the wooded slopes of the Vindhyan hills. Formerly the largest town in the District, it now ranks second to Hardā, and the population, which in 1881 was 15,863, was returned in 1901 as 14,940. The town includes seven hamlets, namely, Hoshangābād, Khanjanpur, Rasūliā, Kishanpur, Jalālabād, Mālikheri and Dongri. The total area is 2279 acres, of which 887 acres are held in ordinary mālguzāri right, while the remainder is *nazūl* or Government land, or has been acquired by the railway company. Hoshangābād was created a municipality in 1869; its administration is described in Chapter IX. One of the most striking features of the town is the Nerbudda ghāts or terraces, which have been constructed at various times by private benefactors. They are probably the finest in the Central Provinces, and command a beautiful view of the river and the Vindhyan hills beyond.

Hoshangābād is believed to have been founded at the beginning of the 15th century by Sultān

Historical.

Hoshang Shāh Ghori, the second of the

Ghori kings of Mālwā, from whom it accordingly derives its name. The fort, remains of which still exist, is supposed to have been built by him in one day, together with the forts of Handia and Jogā. According to local tradition, he died and was buried here beneath the *dargāh* or shrine which still exists; but his bones were afterwards taken up and removed to Māndu. Hoshangābād did not, however, attain to any importance until the Bhopāl conquest, about 1720, when the fort was either built or enlarged and a trading population began to collect round it. In 1795 Hoshangābād was attacked by Benī Singh Sūbahdār, an officer of the Nāgpur Rājā, and after a two months' siege the fort was evacuated by the Bhopāl commander. In 1802, however, it was recaptured by Wazīr Muhammad, the famous Diwān of the Nawāb of Bhopāl, who followed up his success by overrunning the surrounding country. But, while

besieging Sohāgpur, he was overwhelmed by a relieving force, and driven in headlong rout back to Hoshangābād. So hard pressed was he that his horse "Hansrāj" was killed beneath him as he entered the town, and he only escaped by mounting his celebrated crop-tailed horse "Pankhraj" and leaping over the ditch and parapet into the fort. A rude stone figure of a horse near the Club still marks the spot where "Hansrāj" fell. The Nāgpur army besieged the fort for some time, and being unable to take it, contented themselves with burning the town and departed. In 1809 the fort was again attacked by a Nāgpur force, and after a siege of six months capitulated. This was the end of the Bhopāl dominion. In 1817 Hoshangābād was occupied by a British division under General Adams, operating against the Pindāris. Since 1818, the year of the cession, it has been the residence of a British official. Besides the remains already mentioned, the only relic of antiquity is the tomb of Devā Bai, the female ascetic, who, with Rāmjī Bābā of Raipur, is the presiding deity of Hoshangābād.

Lying at the junction of the old Bombay road with the road from Bhopāl to the south,

Local trade and industries.

Hoshangābād was once well situated for commerce. But since the opening of the railway it has been entirely superseded by Itārsi, which enjoys a much more central position. The rail-borne exports of Hoshangābād are insignificant, averaging during the five years ending 1906 only 68,000 maunds, or less than 3 per cent. of the District total. Similarly imports are confined to local consumption, and averaged during the same period 57,000 maunds, or 6 per cent. of the District total. The chief article of export is building stone from the Adamgarh quarry at the Black Rocks. Local industries are few. The most important are brass work, which is exported to some extent, and bamboo walking sticks. Good European furniture, agricultural implements, and all kinds of wood

and iron work are made at the Friends' Mission workshops at Rasūlia. There is a good daily market, which supplies articles for local consumption.

The public buildings are numerous, including all the usual courts and offices of a Divisional Public institutions. and District headquarters. There are seven schools. The most important is the high school and hostel, situated near the Fort. In addition there are three municipal primary schools for boys and a Government primary school for girls, while the Friends' Mission supports a primary school for boys and a middle school for girls. The Mission also maintains a Church and an orphanage. The Bowie Hospital is the chief medical institution of the District, and there is a veterinary dispensary. Other public buildings include the town hall, built in 1885 at a cost of Rs. 18,000, which was borne by municipal and District funds, the English church, the jail, the Sadar Distillery for country liquor, which supplies the Narsinghpur and Nimār Districts as well as Hoshangābād, the police Station-house, circuit-house, dāk bungalow, and the post and telegraph offices. The principal temple is that of Rāmji Bābā, which is frequented by pilgrims from great distances.

Itarsi.—An important town in the Hoshangābād tahsil, at the junction of the Bombay-Calcutta line with the Midland section of the Great Indian Peninsula railway, which is the mail route from Bombay to the Punjab. It is 463 miles from Bombay and 936 from Calcutta. The population in 1901 was 5769, and it is rapidly increasing, having nearly doubled in the preceding decade. The rise of Itārsi is due to the commercial activity brought by the opening of the railway. Not only does it occupy the most central position in the tahsil, but the high road which runs from here to Badnūr brings it much of the trade from the Betūl District. The rail-borne exports during the five years ending 1906 averaged 507,000 maunds or 21 per cent. of the

District total, while in 1906 they reached the figure of 719,000 maunds, beating Hardā by nearly 170,000 maunds. Imports during the same period averaged 202,000 maunds or 21 per cent. of the District total. The chief articles of export are grain and forest produce. In addition to its importance as a commercial centre, Itärsi has the largest cattle market in the District. In 1905-06 over 12,000 cattle were sold here, realising an aggregate of $2\frac{1}{2}$ lakhs. The market is held on Thursdays, and a registration fee of 3 pies in the rupee is charged. Market dues on other goods are levied at the rate of 3 pies a shop. There is also some trade in cotton, and a ginning factory was established here in 1906, but hitherto it has not employed much labour. The total area of Itärsi is 2600 acres, and it was formerly managed under the Village Sanitation Act; but in 1905, 500 acres were declared a "notified area" under the Municipal Act. The committee's chief source of revenue is cattle registration fees, which in 1905-06 realised Rs. 4000. A drainage scheme involving expenditure of Rs. 20,000 has been sanctioned. Water is now supplied from wells, but the railway company is considering a waterworks scheme, to which the committee propose to contribute. The town possesses several schools. The Friends' Mission supports a vernacular middle school and a primary school, while there is another primary school for boys under the District Council and a Government primary school for girls. The mission has also an orphanage for boys. Among the public buildings are the range office of the Hoshangābād forest range, a police Station-house, dāk bungalow, and post and telegraph offices. The railway station is of some size, and has large waiting and refreshment rooms. The staff is large and is likely to be augmented by the transfer of part of the staff from Hardā. It is provided with a church and an institute. A mail tonga service runs from here to Badnūr, the headquarters of the Betūl District, 55 miles distant.

Jagirs.—The District includes the whole of one jāgir General description. estate and part of two others. The

Chhāter jāgir of 13 villages lies entirely within the limits of Hoshangābād. Twelve of the 14 villages of the Bāriām-Pagārā jāgir are in Hoshangābād, while the other two are in Chhindwāra District. Only six of the villages of the Pachmarhi jāgir are within the Hoshangābād border, and the estate, which has always been administered from Chhindwāra, is described in the volume dealing with that District. It may be added that all three estates were formerly in the jurisdiction of Chhindwāra, but owing to their inaccessibility from headquarters the present adjustment of territory was effected in 1870. The area of the Chhāter jāgir is 45 square miles, and its population 2347, while Bāriām-Pagārā has an area of 100 square miles and a population of 1022. These jāgirs are situated at the south-east corner of the Sohāgpur tahsil, stretching from the edge of the Nerbudda valley far into the recesses of the Pachmarhi hills. The Chhāter jāgir is a compact estate on the north face of the range of hills which runs from Fatehpur to the river Dudhī, and contains some fairly open country, fit for cultivation, on the verge of the plain. The fields are studded with valuable mahuā trees, while the forests in the background produce a good proportion of teak. The Bāriām-Pagārā jāgir lies further to the south, in the wildest and most picturesque portion of the District. Its villages are much more scattered, being intermixed with outlying villages of the Pachmarhi jāgir. Some are perched on the hill-tops, while others are hidden away in the ravines and deep forests on their slopes. Cultivation is confined to a few small clearings, occupied by aboriginal tribes of Gonds, Korkūs and Bhariās, who rely on the fruits of the forest to supplement the resources of agriculture. Much of the income of both estates is derived from forest produce. The wealth of the Bāriām-Pagārā jāgir has been greatly increased by the opening of the Piparia-Pachmarhi road, which has brought much of its forests within reach of the railway,

while the Pachmarī sanitarium provides a ready market for fuel and grass. The *harrā* tree (*Terminalia Chebula*), which produces the myrabolans of commerce, grows plentifully among the sandy hills of Bāriām-Pagārā, while in the lower lying forests of Chhāter teak (*Tectona grandis*), mahuā and lac are the most valuable products.

The Chhāter jāgir is held by the Gond Rājā of Fatehpur-Tekripurā, while the jāgirdār of Bāriām-Pagārā is a Muāsi Korkū, bearing the title of Thākur. History.

The early history of these estates is similar to that of the Chhindwāra jāgirs. Their origin is lost in the obscurity of the old Gond kingdom of Deogarh. It is doubtful whether either of the families are of very great antiquity. The old records show that the Chhāter estate was conferred by the Gond Rājā Bakht Buland Shāh in Sambat 1752 (A. D. 1695) on the present family, by whom it has been held continuously ever since. The Bāriām-Pagārā jāgir was formed on a partition of a large estate into three shares between the jāgirdārs of Pachmarhi, Rai Kheri and Bāriām-Pagārā. With the fall of the Deogarh dynasty, the jāgirdārs came under nominal subjection to the Marāthā kingdom of Nāgpur, but the poverty and the inaccessibility of their homes rendered them safe from interference. In 1818 the rebellion of Appa Sāhib, who took refuge in the Pachmarhi hills, brought these jāgirs into more prominence. The task of restoring order fell to Sir Richard Jenkins, Resident at Nāgpur, who acknowledged the chiefs as the heads of their estates and held them responsible for their good management. This policy was entirely successful and their later history is almost undisturbed. Though in 1858 Tantia Topi marched in open rebellion along the foot of the hills, and in 1859 the Bhopāl insurgent Nawāb Adil Muhammad Khān penetrated as far as Fatehpur, neither of the jāgirdārs was tempted to break the peace, while in 1860 the Thākur of Bāriām-Pagārā rendered useful assistance

in the capture of Hulli Bhoi, the chief subordinate of Bhabūt Singh, the rebel jāgīrdār of Harrākot.

There can be but little doubt that the original tenure of these estates was a service tenure under which the holders were required to keep the roads over the *ghāts* open

Tenure and settlements. and free from marauders, so that pilgrims might visit in safety the holy shrine of Mahādēo in the Pachmarhi hills. Large numbers of pilgrims visited the sacred cave, and the easiest way to secure their protection was to enlist the services of the chiefs of the forest tribes. But as first one and then another chief was recognised as the superior authority, considerable confusion arose. In 1820 the tenures were placed upon a more permanent basis by Sir Richard Jenkins, who issued deeds setting forth their principal conditions. The states were confirmed in perpetuity upon the chief, and their rights to levy certain taxes and cesses, including excise, house-tax, and so on, were recognised. The duties imposed were the keeping open of the *ghāts* and roads to the shrine, the protection of the pilgrims, the maintenance of peace and order, and personal attendance with followers upon the Rājā of Nāgpur when so called upon. A nominal tribute of forest produce or money was also imposed. At the same time the old pilgrim tax was resumed, and a stipend substituted. The exact tribute levied at this time from the Chhāter jāgir is unknown. But the old records of the Bāriām-Pagārā estate show that in 1827 the jāgīrdār paid Rs. 300 Nāgpuri, and in 1861 Rs. 200 Nāgpuri, and this sum was reduced to Rs. 125 as a reward for the assistance given in the suppression of the Harrākot rebellion. Sir R. Jenkins' settlement continued until 1867, when these jāgirs were re-settled with the Chhindwāra District by Mr. Ramsay. The most important part of his settlement was the conferral of a proprietary status on the jāgīrdārs, upon lines similar to that followed in dealing with ordinary mālguzāri villages. The final grant of 1874, which was confirmed by

the Crown Grants Act (XV of 1895) and is still in force, determines the incidents of the jāgīrdārs' tenures. The jāgīrdār is the sole superior proprietor, and the estate with its privileges cannot be transferred except with the sanction of the Chief Commissioner; the succession is regulated by the rule of primogeniture, and partition is not allowed; the relations of the jāgīrdār are entitled by custom to maintenance; summary removal will follow disloyalty or bad administration. Mr. Ramsay valued the assets of the estates thus :—

	Chhāter.	Bāriām-Pagārā.
	Rs.	Rs.
Payments of tenants	1,178	367
Estimated value of area held as home farm and by grantees	92	32
Siwai receipts	81	278
	<hr/>	<hr/>
	1,351	677

A nominal quit-revenue of Rs. 125 was demanded from Chhāter, and of Rs. 10 from Bāriām-Pagārā. In view of the amount formerly demanded from Bāriām-Pagārā, it is not clear why the quit-revenue was now fixed so low. In addition, the jāgīrdārs were permitted to derive income from opium and drugs, excise, pāndhri,¹ cattle-pounds and unclaimed property, while the right of the jāgīrdār of Bāriām-Pagārā to a portion of the offerings at the Mahādeo shrine in every alternate year was not disputed.² The power to maintain a police force was also granted, but never exercised. The jāgirs were again re-settled by Mr. Sly in connection with his settlement of the Hoshangābād District in 1891-96. He valued the full assets as follows :—

	Chhāter.	Bāriām-Pagārā.
	Rs.	Rs.
Payments of tenants	4,056	6:0
Estimated value of area held as home farm and by grantees	471	121
Siwai receipts	3,210	2,000
Total mālguzāri assets	<hr/>	<hr/>
	7,737	2,741

¹ A tax on non-agricultural incomes.

² In the other years this portion is taken by the jāgīrdār of Pachmarhi.

			Chhāter.	Bāriām-Pagārā.
			Rs.	Rs.
Brought forward	...	...	7,737	2,741
Opium and drugs	...	...	150	50
Liquor	..	..	150	300
Pāndhri	...	...	10	Nil
Cattle-pounds ...	...	...	50	150
Unclaimed property	...		Nil	Nil
		Grand total	8,097	3,241

Receipts from the Mahādeo shrine were estimated at Rs. 200, but were not included in the assets. These figures, which were undoubtedly a lenient assessment, illustrate the improved prosperity of the estates, due largely to the opening of the Piparia-Pachmarī road. Cultivation had extended, tenants' payments had greatly increased, and the forests, which had formerly brought in but little, were now a most valuable property. The revenue to be paid was fixed on the mālguzāri assets alone; and to allow for fluctuations in the shifting cultivation and in the value of forest produce, a further deduction of one-third was allowed. A *kāmiljamā*, or ordinary land revenue assessment, of Rs. 2580 and Rs. 915 respectively was then assumed at half assets. On this assumption the proprietor's cesses at the ordinary rate of $13\frac{1}{2}$ per cent. were fixed,¹ giving payments of Rs. 371 and Rs. 129 from each estate respectively. The revenue proper was again levied as a nominal *takolī*, or quit-revenue, being assessed at Rs. 200 on the Chhāter jāgīr, and Rs. 95 on Bāriām-Pagārā. The consolidated revised payments thus amounted to Rs. 571 from Chhāter and Rs. 224 from Bāriām-Pagārā. This was, of course, a very great enhancement on the Rs. 125 and Rs. 10 demanded under Mr. Ramsay's settlement. But Mr. Sly considered a substantial increase desirable, in order to make it clear beyond doubt that such nominal payments had no permanency attached to them, and that Government would eventually demand a fair share

¹ See para. 223.

of the assets. It may be noted, too, that the total revised payments still amounted to considerably less than 10 per cent of the assets. Further changes have been made in the position of the *jāgīrdārs* since Mr. Sly's settlement. In 1902 the management of excise and cattle pounds was resumed by Government on payment of suitable compensation, while police jurisdiction, which had never been exercised by the *jāgīrdārs*, was formally taken over. The *jāgīrdārs*, like other proprietors, have benefited by the abolition of cesses, and their present payments amount to Rs. 190 *takolī* and Rs. 151 cesses from Chhāter, and Rs. 85 *takolī* and Rs. 53 cesses from Bāriām-Pagārā.

Previous to Mr. Sly's settlement no Land Record Staff had been employed in either estate. His

Statistics of cultivation and agriculture.

statistics were based on the *bigāsar* system, that is, on an estimate of the amount of seed stated to be sown in each

field; and in Mr. Sly's opinion they were not worth the trouble taken in compiling them. A patwāri has now been appointed to each estate, as one of the District Land record staff, and the ordinary village maps and papers have been introduced. The statistics of cultivation and cropping in 1905-06 are shown in the following statement:—

STATISTICS OF CULTIVATION.

Name of Jagir.	UNOCCUPIED AREA.			OCCUPIED AREA.					Grand total.	
	Tree forest.	Miscellane-	Total unoccu-	Under cultivation.			Old fallow.	Total occu-		
				Under crop.	New fallow.	Total.				
Chhāter ...	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	
Chhāter ...	28,612	1,212	24,824	4,640	1,077	5,717	570	6,287	31,111	
Bāriām ...	36,328	3,360	39,688	878	447	1,325	126	1,451	41,134	

STATISTICS OF CROPPING.

Name of Jagir.	Wheat and wheat gram.	Gram.	Rice.	Kodon- kutki.	Other crops.	Total.	Area double- cropped.	Net crop- ped area.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Chhāter	279	385	119	2,684	1,285	4,732	92	4,640
Bāriām	116	34	12	327	109	808	20	878

N.B.—The Bāriām figures do not include the two Chhindwāra villages.

It will thus be seen that Chhāter is much more fully cultivated than Bāriām-Pagārā. Several of the Chhāter villages situated below the hills contain *rankār* and *morand* soil, which will produce fair spring crops; but wheat cultivation has suffered much in recent years from the growth of the weed *kāns*. In both estates the bulk of the cultivated soil is a light sandy loam, which is only suitable for autumn crops, and requires a good rainfall to give a decent outturn. The small millets, kodon and kutki, are by far the most important crops; some *tūr*, maize, *sawān*¹ and *madgi*² are also grown. Juār and rice are confined almost entirely to *bārā* or garden cultivation. Unirrigated sugarcane is occasionally to be seen. The cultivation is generally of a rough character, but little trouble being taken in the preparation of the soil. Bullocks are scarce, but as in other forest areas in the District, the cultivators of the plains send their herds to these wastes to graze, and allow the inhabitants to train the young stock by using them for their own cultivation. One ploughing is considered sufficient, except for the small area under wheat and gram. Most of the crops are sown broadcast, and not much trouble is taken about weeding. When the crops are growing, watching the fields is a continuous and arduous task, and much damage is done by wild animals.

¹ *Panicum frumentaceum*.

² *Eleusine coracana*.

Joga.—A village in the Hardā tahsil, situated on the bank of the Nerbudda, 19 miles north-west of Hardā. It was formerly the headquarters of the Bairi Thākurs, but is now part of the Government forest reserves. On a rock in the bed of the Nerbudda there is a fine Mughal fort, in good repair, which is said to have been built by Aurangzeb. The view from the battlements up and down the river is very picturesque. Tradition says that an older fort, built on the same day as the Hoshangābād and Handia forts by Hoshang Shāh Ghori of Mālwā, formerly occupied this site. The remains of a Pindāri fort are to be seen on the opposite bank. There are two shrines to Muhammadan generals, once governors of Joga, which are attended by a Fakir. Near by are traces of an old silver mine,¹ known as Chāndi Khadān.

Kesla.—A large village in the Hoshangābād tahsil, lying on the Itārsi-Betūl road, 11 miles south of Itārsi. Population 800. It is the best village in the Bordhā Estate, and has been divided equally between the two branches of the Sūbahdār family. The weekly market, which is held on Sunday, is much frequented by the inhabitants of the surrounding forest tracts. The village has a police Station-house, primary school, cattle pound and post office.

Khapa.—A small forest village in the Sohāgpur tahsil, situated on the bank of the Denwā river, 15 miles south-west of Sohāgpur. Formerly a ryotwāri village, it was handed over to the Forest Department in 1905, when the range office of the Borī forest range was transferred here from Borī.

Khaparia.—A large village in the Seoni tahsil, situated on the Andan river, 8 miles north of Seoni. Population 1000. Khapariā is the principal village in the small estate of the Badkur family. There is a weekly bazar on Thursdays at which country cloth, woven by the Balāhis of the neighbouring villages and printed and dyed by the Chhipas and Nilgars of Khapariā, is sold. Kumhārs here make *chilams*, or pipes for smoking, of some local reputation. Public institutions include a primary school for boys, and a branch post office.

¹ See para. 181.

Khaparkhera.—A large village in the Sohāgpur tahsil, 5 miles north of Piparia railway station, on the Piparia-Sāndia road. Population 1900. It belongs to the Fatehpur-Bichpurā estate, but is held by a protected thekādār. A large weekly market is held on Wednesdays; market dues of one pice per *kānθi* or yard of country cloth and one pice for every shop are levied by the Bichpūra Rājā. There is a shrine here of Rāmjī Bābā, the devotee of Raipur, and a small fair is held in his honour immediately after the Hatwāns fair in Chait. The village has a good primary school and post office. A good garden with an orange grove is maintained by the protected thekādār. Winnowing machines, on an American model, and other agricultural implements are made by the manager of the estate.

Khirkian.—A large and prosperous village in the Hardā tahsil, situated on the Great Indian Peninsula Railway, 19 miles south-west of Hardā, and 5 miles north-west of Chārwa. Population 1100. Khirkīān is becoming an important place of export, especially for oilseeds, wheat and cotton. Between 1902 and 1906 its rail-borne exports quadrupled, amounting in the latter year to 159,000 maunds or 6 per cent. of the District total. The large exporting firms now have agencies here. Its imports too are considerable, supplying the whole of the Chārwa tract and a considerable area to the north. A weekly market on Tuesdays has recently been started. A cotton ginning mill and a pressing factory have been established here. There is a District Council *sarai* and post and telegraph offices. The water-supply is obtained from two large springs for which reservoirs have been constructed. There is also a “Gao-mukh” spring, from which the waters of the Nerbudda are said to flow; Lāl Dās Sādhu, a former resident, was the devotee for whose benefit this miracle was performed.

Lokhartalai.—A village in the Seoni tahsil, 7 miles south-west of Seoni, on the right bank of the Moran river. Population 600. It is the chief village of a considerable Gond estate, which has now fallen into the hands of

moneylenders. A market is held here on Fridays, which supplies the inhabitants of a considerable forest area.

Macha.—A large village in the Sohāgpur tahsil, 13 miles north-east of Sohāgpur. Population 1700. It is situated near the junction of the Kubjā river with the Nerbudda, which like other confluences is held sacred. Temples have been built by Seth Bālkishan of Sobhāpur in honour of Rām Lakshman, an incarnation of Vishnu, and by Rājā Gokul Dās of Jubbulpore in honour of Rādhā Ballabha, an incarnation of Krishna. The actual confluence is called Mācha Sangam or Kubjā Sangam. There is an old saying that any leper staying here for a certain number of days will be cured of leprosy. A visit to Mācha is also supposed to be an efficacious remedy for barrenness and demoniacal possession. Local opinion is, however, sceptical. Two small annual fairs are held, one on Til Sankrānt, and the other at the full moon of Kārtik (October). Mācha has a primary school for boys.

Magardha.—A village in the Hardā tahsil, 14 miles south of Hardā, on the outer fringe of the Sātpurā hills. Population 800. It is the chief village of a family of Nāramdeo Brāhmans, who own a small estate in this vicinity. About a mile from the village, to the south-east, is a large cave, which was once the home of a famous dacoit, Sheikh Dullā. More recently a still more celebrated dacoit, Tantia Bhil, resorted to the same stronghold but was driven out and nearly captured by the mālguzār, Nandrām Patel. A weekly bazar is held at Magardhā on Fridays. There is a primary school, and a post office.

Mahadeo or Mahadeva.—Signifies Great God, or Siva. By this name is known the range of hills, which lies at the south-east of the Sohāgpur tahsil, encircled by the rivers Denwā and Sonbhadrā, and including within its limits the highest summits of the Sātpurā range. More especially the name is applied to a single peak, 4384 feet high, which rises from the southern edge of the Pachmarhi plateau, and beneath which lie the cave and shrine of Mahādeo.

These hills have always been an object of especial veneration among Hindus. To visit the cave itself and the surrounding heights, particularly the sacred summit of Chaurāgarh or Chaurādeo, is an exceptionally meritorious pilgrimage ; and the tenure on which the neighbouring jāgīrdārs originally held was almost undoubtedly the protection of pilgrims who approached the god. The guardian of the shrine was formerly a servant of these chiefs, and received the pilgrims' offerings as his masters' legitimate dues. And though the present picturesque incumbent—a familiar figure to all who have stayed at Pachmarī—appears to be an intruder, the right of the jāgīrdārs of Bāriām-Pagārā and Pachmarī to divide the pilgrims' offerings is still recognised by Government. The Mahādeo cave is thus described by Captain J. Forsyth:¹ ‘The cave itself opens through a lofty natural ‘arch in a vertical sandstone cliff; and for about three hun-‘dred feet runs straight into the bowels of the hill. It is ‘without doubt natural; and a considerable stream of clear ‘cold water issues from a cleft at its further end. Here is ‘set up the little conical stone (*lingam*) which represents the ‘god, and attracts all these pilgrims once a year. No ‘temple made with hands, no graven image, nothing of the ‘usual pomp and ceremony of Brahmanical worship, adorns ‘this forest shrine. Outside on a platform a Brāhman sits ‘chanting passages in praise of the god out of the local Sivite ‘gospel (the *Rewa Khand*) ; and a little way off an old woman ‘tolls the great bell at intervals. But within there is no ‘officiating priest, no one but a retainer of the aboriginal ‘chief, whose right it has been from time immemorial to act ‘as custodian of the shrine, and to receive the offerings of the ‘pilgrims. No pilgrim ever brings more up the hill with him ‘than he means to offer ; for he may take back nothing. His ‘last rupee, and even the ornaments of the women, must be ‘left on the shrine of the god. Before passing into the cave ‘the pilgrim leaves with the Brāhmans outside (along with a

¹ The Highlands of Central India, Chapter IV.

'sufficient douceur) his pair of small earthen vessels for the receipt of holy water. These they fill from the stream, seal up, and return to the pilgrim, who then proceeds to make the tour of the holy places on the Mahādeo hills. This takes him the whole of the remainder of the day. At each place a cocoanut is offered; and little piles of stones, like children's card-houses, are erected at some point of their peregrinations to signify a desire for a mansion in Kailās—the heaven of Siva. Many of the places which should in theory be visited are very inaccessible, such as the top of the Chaurādeo peak, and very few of the pilgrims make the whole round.' On Shivrātri (February or March), one of the largest fairs of the District is celebrated here. Usually between 30,000 and 40,000 pilgrims now collect. Owing to its inaccessibility this fair, or *melā*, probably attracts a more strictly religious gathering than any other such assemblage. 'It draws its multitude,' says Captain Forsyth,¹ 'into a remote and desolate valley surrounded by the eternal hills, where the great god has his chiefest dwelling-place in these central regions. No gorgeous temples or impressive ritual attract the sightseer. The pathways leading to the place are mere tracks, scarcely discernible in the rank jungle, and here and there scaling precipitous rocks, where the feet of countless pilgrims have worn steps in the stone. Young and old have to track out these paths on foot; and all the terrors of pestilence, wild beasts, and the demons and spirits of the waste, surround the approach in their excited imaginations. Arrived at the foot of the holy hill, the pilgrim finds neither jollity nor anything more than the barest requirements of existence awaiting him. His food is dry parched grain, his couch on the naked earth, during his sojourn in the presence of Mahādeva. Should he be among the first to arrive, the tiger may chance to dispute with him the right to quench his thirst at the watering place in the Denwā river. Those who come to a place like this for pleasure must be few

'indeed.' To bathe in the waters that issue from the sacred cave is, of course, the chief duty of the devotee. The final act of worship is celebrated on the summit of Chaurāgarh, which is only reached by a difficult and precipitous path. An eye-witness¹ has kindly contributed the following description of the scene :—'A remarkable sight is now witnessed. The top of the mountain is an almost rectangular space, some eighty yards square, gently sloping upwards from all sides to the centre, which is partly grown with coarse grass and scrub, and littered with stones. Two stacks of Sivite tridents, some little distance apart, crown the top. At their base are idols consisting of fragments of curiously shaped igneous rock anointed with vermillion. About these the bulk of the pilgrims gather—others, chiefly women, sitting at a little distance as spectators—while from high up among the larger tridents a priest, swaying himself to and fro, excites the crowd to the extremes of worship and sacrifice. His actual words are lost in the shouting and general uproar, but fear, wonder and curiosity are depicted on every upturned face. Clouds of sacrificial smoke at times envelope the pile and add confusion to a scene that increases in wildness every moment. The crowd is added to continually by new arrivals from below, until it seems as if the confined space can safely hold no more. A devotee now approaches the top carrying a large trident. As he sights the frantic group, he salutes the god and proceeds to add his offering to the bristling pile, while, worked up to a pitch bordering upon madness, one after another of the frenzied devotees mounts among the tridents, and clasping the priest round the waist falls upon his neck, shouting and gesticulating and sobbing and entreating in every stage of demoniacal possession. Men and women are prostrating themselves before this scene and kissing the ground that reeks with the blood of sacrifices in progress. The bleeding heads of goats and fowls are tossed into the

¹ Mr. A. Taylor, of the Friends' Mission, Hoshangābād.

‘ crowd of worshippers about the three-pronged spears, while ‘ a continual shower of cocoanuts, whole and in fragments, as ‘ well as small silver and copper coins, rains over all. In ‘ this way the worship of Mahādeva continues through the ‘ day.’ This gathering has sometimes been a source of trouble to the District authorities. Near by the cave a sheer cliff rises above the sacred stream. Here in former times human victims hurled themselves over the rock as sacrifices to the bloody Kāli and Kāl Bhairava, the consort and son of Siva the Destroyer. This practice was sternly suppressed by the British Government ; but in order that the offended deity—so it appeared to the Hindu mind—might not be baulked of his sacrifice, the gathering was year after year visited by violent outbreaks of cholera, and broke up in wild disorder. Finally, in 1865, the fair was prohibited. It has now been restored, but is superintended by the tahsildār of Pachmarhī, who is responsible for its orderly conduct. It may be added that the Mahādeo hills have been the scene of political as well as religious difficulties. It was to this mountain fastness that Appa Sāhib fled in 1818 ; and at the time of the mutiny, the raids of Tantia Topi in 1858 and of Nawāb Adil Muhammad Khān in 1859 were directed to the same refuge. Finally, in 1859 Bhabūt Singh, the Korkū jāgīrdār of Harrākot, broke into open rebellion here, and was not suppressed for six months.

Makrai¹.—A small Feudatory State in the Hardā tahsil lying between 21° 58' and 22° 14' N., and 76° 57' and 77° 12' E., with an area of 155 square miles. The State contains some rich villages lying in the open valley of the Nerbudda, but the greater part of it is situated on the lower slopes of the Sātpurā range, and consists of low hills covered with forest, of which teak, *sāj* (*Terminalia tomentosa*) and *tinsā* (*Ougeinia dalbergioides*) are the principal trees. The headquarters of

¹ This article is a reprint of the draft article for the Imperial Gazetteer.

the State are at Makrai, which contains an old hill fort, and is 15 miles from Bhiringi station and 19 miles from Hardā on the Great Indian Peninsula Railway. The ruling family are Rāj Gonds and claim a high antiquity of descent and a jurisdiction extending in former times over the whole of the Hardā tahsil. There is, however, no historical evidence in support of their pretensions, and all that is known is that they were deprived by Sindhia and the Peshwā of the forest tracts of Kālibhit and Chārwa. The present chief Rājā Lachhū Shāh *alias* Bhārat Shāh was born in 1846 and succeeded in 1866. He was temporarily set aside for mismanagement in 1890 and reinstated in 1893, when he appointed a Diwān with the approval of the Chief Commissioner. The population of the State in 1901 was 13,035 persons, showing a decrease of 30 per cent. in the previous decade, during which it was severely affected by famine. In 1904 the occupied area amounted to 40,000 acres, of which 35,000 were under crop. The cropped area is said to have decreased by 3000 acres since 1894. Wheat is the staple crop, and juār, cotton and gram are also grown. The revenue in 1904 amounted to Rs. 62,000, of which Rs. 43,000 were derived from land, the average taxation of land being Re. 1-8-0 per acre. Other principal sources of income were forests Rs. 5500, excise Rs. 5000, and law and justice Rs. 1400. The expenditure in the same year was Rs. 64,000, of which Rs. 14,000 were expended in the maintenance of the ruling family, Rs. 6100 on administration, Rs. 4700 on police, Rs. 1600 on education, Rs. 1700 on medical relief, and Rs. 9000 on miscellaneous items. The average figures of receipts and expenditure for the five years ending 1903 were Rs. 65,000 and Rs. 61,000 respectively. No tribute is paid to Government. The State contains 42 miles of unmetalled roads. It maintains five primary schools, the total number of scholars being 273. In 1901, 355 persons were returned as able to read and write. A dispensary is located at Makrai. Makrai is under

the charge of the Deputy Commissioner of the Hoshangābād District, subject to the control of the Commissioner, Nerbudda Division.

Malni.—The name given to a wide tract of hill and forest in the Sohāgpur tahsil, lying to the south of the Denwā river and surrounded on three sides by the Tawā, Denwā and Son-bhadrā rivers. The highest point is the hill of Tek (2,728 feet). Formerly a *tāluka*, the Mālni tract is now included in the Government forest reserves, and forms part of the Borī range. There is also a river of the same name, which is a tributary of the Tawā.

Matkuli.—A village in the Sohāgpur tahsil, 14 miles south of Piparia railway station, at the junction of the roads from Pachmarī and Chhindwāra. Population 700. It is the centre of a group of small jungle villages, the inhabitants of which attend the weekly bazar held on Wednesdays. The Pachmarī road here crosses the Denwā by a stone bridge, which is not infrequently covered during the rains. There are post and telegraph offices. A large military encamping ground of over 200 acres forms a kind of village green.

Moran River.—A river which rises in the Betūl hills, and flows down through the forests of Lokhartalai to join the Ganjāl at Chhidgaon. Its length is 56 miles. During the rains it is a mountain torrent, and for the rest of the year a clear shallow stream, flowing on a gravelly bed. In 1864 a scheme was projected for irrigating the Seoni tract by damming the Moran river, but it was abandoned as impracticable.

Nandarwara.—A village in the Seoni tahsil, 7 miles east of Seoni. Population 800. There is an old *dargāh* or tomb here of Ghaibi Shāh Wali, for the maintenance of which 20 acres of land were given revenue-free by Jiā Lāl, Sūbahdār of Seoni, to the family of Janula Shāh. A weekly market of some size is held here on Sundays, for the sale of articles of ordinary consumption. There is a primary school for boys, a cattle pound and a branch post office.

Nerbudda River.¹—(Narbada; Narmada—The Namados of Ptolemy; Namnadios of the Periplus).—One of the most important rivers in India. It rises on the summit of the plateau of Amarkantak ($22^{\circ} 40' N.$ and $81^{\circ} 46' E.$) at the north-eastern apex of the Sātpurā range in Rewah (Central India), and enters the sea below Broach in the Bombay Presidency, after a total course of 801 miles.

The river rises in a small tank, 3500 feet above the sea,

Course of the
river.

surrounded by a group of temples, and guarded by an isolated colony of priests and falls over a basaltic cliff in a

descent of 80 feet. After a course of about 40 miles through the State of Rewah, it enters the Central Provinces and winds circuitously through the rugged hills of Mandlā, pursuing a westerly course until it flows under the walls of the ruined palace of Rāmnagar. From Rāmnagar to Mandlā town it forms, for some 15 miles, a deep reach of blue water, unbroken by rocks, and clothed on either bank by forest. The river then turns north in a narrow loop towards Jubbulpore, close to which town, after a fall of some 30 feet, called the *dhuan-dhāra* or “fall of mist,” it flows for two miles in a narrow channel which it has carved out for itself through rocks of marble and basalt, its width being here only about 20 yards. Emerging from this channel, which is well known as the “Marble Rocks,” and flowing west, it enters the fertile basin of alluvial land forming the Nerbudda valley, situated between the Vindhyan and Sātpurā hills, and extending for 200 miles from Jubbulpore to Handia with a width of about 20 miles to the south of the river. The Vindhyan hills rise almost sheer from the northern bank along most of the valley, the bed of the river at this part of its course being the boundary between the Central Provinces and Central India (principally the Bhopāl and Indore States.) Here the Nerbudda passes Hoshangābād and the old Muhammadan

¹ This article is abridged from the draft article for the Imperial Gazetteer.

towns of Handia and Nimāwar. The banks of the river in this valley are about 40 feet high, and the fall in its course between Jubbulpore and Hoshangābād is 340 feet. Below Handia the hills again approach the river on both sides and are clothed with dense forests, the favourite haunts of the Pindāris and less famous robbers. At Māndhar, 25 miles below Handia, there is a fall of 40 feet, and another of the same height at Punāsa. Emerging from the hills beyond Māndhāta on the borders of the Central Provinces, the Ner-budda now enters a second open alluvial basin, flowing through Central India (principally Indore State) for nearly 100 miles. The hills are here well away from the river, the Sātpurās being 40 miles to the south and the Vindhya-s about 16 miles to the north. In this part of its course, the river passes the town of Maheshwar, the old capital of the Holkar family, where its northern bank is studded with temples, palaces and bathing *ghāts*, many of them built by the famous Ahalyā Bai, whose mausoleum is there. The last 170 miles of the river's course are in the Bombay Presidency, where it first separates the States of Barodā and Rāj-piplā and then meanders through the fertile District of Broach. Below Broach city it gradually widens into an estuary, whose shores are 17 miles apart as it joins the Gulf of Cambay.

The drainage area of the Ner-budda, estimated at about 36,000 square miles, is principally to the south, and comprises the northern portion of the Sātpurā plateau and the valley Districts. The principal tributaries are the Banjar in Mandlā, the Sher and Shakkar in Narsinghpur, the Tawā and Ganjāl in Hoshangābād, and the Chhotā Tawā in Nimār District. The only important tributary to the north is the Hiran, which flows in beneath the Vindhyan hills, in Jubbulpore District. Most of these rivers have a short and precipitous course from the hills, and fill with extraordinary rapidity in the rains, producing similarly rapid floods in the

Drainage area, tributaries, etc.

Nerbudda itself. Owing to this and to its rocky course, the Nerbudda is useless for navigation, except by country boats between August and February, save in the last part of its course, where it is navigable by vessels of 70 tons burden up to the city of Broach, 30 miles from its mouth. It is crossed by railway bridges above and below Jubbulpore, at Hoshangābād, and at Mortakkā. The influence of the tides reaches to a point 55 miles from the sea, and coupled with the height of the river's banks throughout the greater part of its course, makes it useless for irrigation.

Pachlaora.—A large village in the Sohāgpur tahsil, 9 miles north of Piparia railway station, on the Sāndia road. Population 1500. It is the richest village in the tahsil, containing a very fine stretch of level *kābar* soil, and is entirely given up to spring cultivation. There is a good temple here dedicated to Rāmchandi, an incarnation of Vishnu, a tank, in the middle of which is a shrine to Mātā, and also a fine old *baoli* or well, with steps going down into it. The village has a primary school.

Pachmarhi.—A town in the Sohāgpur tahsil, situated in $22^{\circ} 28'$ N. and $78^{\circ} 26'$ E., on a General description. plateau in the Mahādeo hills¹ of the Sātpurā range, 21 miles south of Piparia railway station, with which it is connected by a road, 32 miles in length, daily traversed by a mail motor and tonga service. Pachmarhi is the summer residence of the local administration, and the sanitarium of the Jubbulpore brigade. A school of musketry is also established here, and three classes, each lasting two months, are held annually. It contains a municipality and a cantonment. The total area of the sanitarium is 23 square miles, of which 19 are classed as forest; about 5 square miles lie in the cantonment, while the remainder is included in municipal limits. The population, which resides chiefly in cantonments, was returned in 1901 as 3021, but

¹ See Mahādeo.

Bunnow, Collo, Derby,

VIEW OF PACHMARI WITH THE RESIDENCY.



during the summer season it is considerably larger. The elevation of the plateau is about 3500 feet, while the surrounding peaks rise to a height of nearly 4500 feet. As a summer station, Pachmarī, owing to its moderate elevation, affords but a partial relief to the heat of the plains, and its average temperature is only about 10 degrees less than that of the Hoshangābād valley.¹ But even in the hottest months a cool breeze almost always blows, and except for a short period in the middle of the day, the heat is never oppressive. During September and October, after the cessation of the rains, the climate is cool and bracing. The rainfall is heavy, amounting to about 77 inches annually, nearly the whole of which is received between June and September. But the rains are not altogether unpleasant. The air is fresh and cold, and though the rain is heavy and continuous, the plateau is usually free from mist. The discovery of Pachmarī as a sanitarium is generally attributed to Captain J. Forsyth, the author of "The Highlands of Central India," who was sent in 1862, under the auspices of Sir Richard Temple, the Chief Commissioner of that day, to explore this portion of the Sātpurā forests. The name of the forest lodge, which he built here and called Bison Lodge, is still preserved by a house erected subsequently on the same site. The plateau was at that time occupied by the Korkū jāgīrdār of Pachmarī, but there are traces of a much older civilisation. The name Pachmarī is a corruption of *Panch Mathī*, or five huts, and is derived from five ancient caves, which have been hewn in a small hill rising abruptly from an open part of the plateau. Brahmanical tradition claims these caves as one of the places at which the five Pāndava brothers sojourned during the period of their wanderings, but there is some reason for supposing that they are of Buddhist origin. Captain Forsyth connected this usurpation with the legend that made the

¹ See para. 23.

neighbouring ravine of Hāndi Kho the retreat of a monstrous serpent, which formerly inhabited a lake on the plateau and vexed the worshippers of Mahādeo, till the god dried up the serpent's lake and imprisoned the snake himself in this rift, formed by a stroke of his trident in the solid rock. 'It needs,' he said,¹ 'no very ingenious interpreter of legend to see in this wild story an allusion to the former settlement of Buddhists (referred to as snakes in Brahmanical writings) on the Pachmarhi hill, and their extinction on the revival of Brahmanism in the sixth or seventh century. Certain it is that there was once a considerable lake in the centre of the plateau, formed by a dam thrown across a narrow gorge, and that on its banks are still found numbers of the large flat bricks used in ancient buildings, while in the overhanging rocks are cut five caves (whence the name Pachmarhi), of the character usually attributed to the Buddhists. Beneath the lower end of the lake lies a considerable stretch of almost level land, on which are still traceable the signs of ancient tillage, in the form of embankments and water-courses. Looking from the portico of the rock-cut caves, it is not difficult for the imagination to travel back to the time when the lower margin of the lake was surrounded by the dwellings of a small, perhaps an exiled and persecuted, colony of Buddhists, practising for their subsistence the art, strange in these wilds, of civilised cultivation of the earth, and to hear again the sound of the evening bell in their little monastery floating away up the placid surface of the winding lake.'

The characteristics of Pachmarhi scenery are its forest glades and its ravines or *khuds*. The

Scenery and surroundings. hills which stand sentinel around the plateau, though often presenting a rugged and striking outline, are not of sufficient height to be remarkable. But the nature of the prevailing sandstone, which is of great depth and succumbs readily to denudation,

¹ The Highlands of Central India, Chap. III.

has permitted the formation, under the action of water, of a maze of gorges and ravines, sometimes picturesque, and sometimes of great grandeur. In contrast to the somewhat gloomy scenery of the *khuds* are the fine stretches of grassy glade, interspersed with clumps of *sāj*, *sāl*, *harrā* and *jāmun* trees, which cover the level plateau; and every eminence commands a splendid prospect of distant hills and valleys, which appear scarcely inferior to Pachmarī itself in natural beauty. One of the chief charms of Pachmarī scenery is its wonderful colouring, especially in the evening light, ‘when the rich reds of the sandstone scarp mellow into ‘an indescribable variety of delicate shades of purple and ‘violet in the evening sun, while broad belts of shadow ‘thrown across green slopes at the foot, and gathering in ‘the recesses of the ravines, seem to project the glowing ‘summits of the rocks to an unnatural height in the soft ‘orange-tinted sky.’¹ For a few minutes after sunset, too, the sky often assumes a splendid purple tint, and a fleeting “after-glow” lights up the hills. Captain Forsyth, the discoverer of Pachmarī, has left a vivid picture of its scenery, which may claim to be considered classical, and its reproduction here needs no apology. Describing his first approach to Pachmarī, he writes²: ‘When an ‘elevation of about 2000 feet (above the sea) had been ‘attained, the character of the scenery began to change. ‘Vertical scarps of the red sandstone which forms the higher ‘plateau began to rise into view at every turn of the path, ‘which now plunged into narrow and gloomy glens, following ‘the boulder-strewn bed of a small stream. The dried and ‘yellow grasses and naked tree stems of the lower slope gave ‘place to a green vegetation thickly covering the soil, and in ‘places almost meeting overhead. The moist banks of the ‘stream were covered with ferns and mosses, and the ‘clear sparkle of the little brooks appeared singularly

¹ The Highlands of Central India, Chap. III.

² The Highlands of Central India, Chap. III.

'refreshing after our long walk up hill in the heat of a sultry
 'and lowering day. After scrambling thus along the sides
 'and bottoms of ravines for some miles, steadily rising at the
 'same time, we suddenly emerged through a narrow pass,
 'and from under the spreading aisle of a large banyan tree
 '(from which this pass gets its name of the Barghāt), on to an
 'open glade, covered with short green grass, and studded
 'with magnificent trees, which I found was the commence-
 'ment of the plateau of Pachmarhi. Heavy masses of cloud
 'had now gathered overhead, and large drops of rain began
 'to fall, betokening, as it proved, the coming of one of the
 'short but severe storms to which these hills are liable at this
 'season.¹ The village of Pachmarhi was still some miles
 'distant, and we hurried along over the now almost level
 'plateau to get shelter as soon as possible, as we had already
 'walked about seventeen miles, and the sun was almost set.
 'The road now lay over a hard and gently undulating sandy
 'soil, crossed by many small streams running swiftly in their
 'rocky beds. Immense trees of the dark-green *harrā* (*Ter-*
minalia Chebulā), the arboreous *jāmun* (*Eugenia Jambolana*),
 'and the common mango dotted the plain in fine clumps,
 'and altogether the aspect of the plateau was much more
 'that of a fine English park than of any scene I had before
 'come across in India. By and by, through the vistas of the
 'trees, three great isolated peaks began to appear, glowing
 'red and fiery in the setting sun against the purple back-
 'ground of a cloud bank. The centre one of the three, right
 'ahead of us, was the peak of Mahādeo, deep in the bowels
 'of which lies the shrine of the god himself; to the left, like
 'the bastion of some giant's hold, rose the square and abrupt
 'form of Chaurādeo; while to the right, and further off than
 'the others, frowned the sheer scarp of Dhūpgarh, the highest
 'point of these Central Indian highlands. I found that the
 'plateau had something of a cup-like shape, draining in every

Bomarea, Colub., Pach.

DHUPGARH. PACHMARHI.



‘direction from the edges into the centre ; where two considerable brooks receive its waters and carry them over the edge in fine cascades. The general elevation of this central valley is about 3400 feet, the ridge surrounding it being a few hundred feet higher, and here and there shooting into abrupt peaks, of which the three I had seen the evening before attain a height of 4500 feet. The area of the plateau is altogether twelve square miles, some six of which in the centre resemble the portion I had before passed through, and consist of fine culturable, though light, soils. Everywhere the massive groups of trees and park-like scenery strike the eye ; and the greenery of the glades, and various wild flowers unseen at lower elevations, maintain the illusion that the scene is a bit out of our own temperate zone rather than of the tropics. Though the ascent on the side I had come up was generally gradual,¹ I found that in all other directions the drop from the plateau was sudden and precipitous. There are three other pathways by which a man can easily, and an unladen animal with difficulty, ascend and descend.² The view from the edge of the plateau, in almost any direction, is singularly fine ; and a still more extensive sweep is commanded from the tops of the higher peaks. To the south, as far as the eye can see, lie range upon range of forest covered hills, tumbled in wild confusion. To the east a long line of rampart-like cliffs mark the southern face of the Mahādeo range, the deep red of their sandstone formation contrasting finely with the intense green of the bamboo vegetation, out of which they rise. Here and there they shoot into peaks of bare red rock, many of which have a peculiar and almost fantastic appearance, owing to the irregular weathering of their material—beds of coarse sandstone horizontally streaked by darker bands of hard vitrified

¹ The present Piparia road.

² These are the Chhindwāra road to the south ; Rorighāt, leading into the Borī valley, to the west ; and Kanjighāt, which descends into the Denwā valley, to the east.

'ferruginous earth. Looking across this wall of rock, to the 'north-east, a long perspective of forest-covered hills is seen, 'the nearer ones seeming to be part of the Pachmarī plateau, 'though really separated from it by an enormous rift in the 'rock, the further ranges sinking gradually in elevation, till, 'faint and blue in the far distance, gleams the level plain of 'the Nerbudda valley. Standing on the eastern edge of the 'plateau, again, the observer hangs over a sheer descent of '2000 feet of rock, leading beyond, in long green slopes, down 'to a flat and forest-covered valley. Its width may be six 'or seven miles, and beyond it is seen another range of hills 'rising in a long yellow grass-covered slope, dotted with the 'black boulders and ending in the scarped tops that mark 'the trap formation. That is the plateau of Motur (Mohtoor), 'with which the general continuation of the Sātpurā range 'again commences, after the break in it occasioned by the 'Mahādeo group. On this side, the forest that clothes the 'valley and the nearer slopes presents a very dark green and 'yet brilliant colouring, which will be noted as differing from 'the vegetation in any other direction. This is the *sāl* forest, 'which I have mentioned before¹ as forming so singular an 'outlier far to the west of the line which otherwise limits the 'range of that tree in Central India. It fills this valley of 'the Denwā, almost to the exclusion of other vegetation, and, 'creeping up the ravines, has occupied also the south-eastern 'portion of the plateau itself. A remarkable feature in the 'configuration of the plateau is the vast and unexpected rav- 'ines or rather clefts in the solid rock, which seam the edges 'of the scarp, some of them reaching in sheer descent almost 'to the level of the plains. You come on them during a ramble 'in almost any direction, opening suddenly at your feet in 'the middle of some grassy glade. The most remarkable 'is the Andeh-Koh (Hāndi Kho), which begins about a mile 'to the east of the village, and runs right down into the Denwā 'valley. Looking over its edge, the vision loses itself in the

¹ See para. 19.

vast profundity. A few dark indigo-coloured specks at the bottom represent wild mango trees of sixty or eighty feet in height. A faint sound of running water rises on the sough of the wind from the abyss. The only sign of life is an occasional flight of blue pigeons swinging out from the face of either cliff, and circling round on suspended pinion, again to disappear under the crags. If a gun is fired, the echoes roll round the hollow in continually increasing confusion, till the accumulated volume seems to bellow forth at the mouth of the ravine into the plain below. Another very striking ravine, called Jainbu-Dwip, lies on the opposite side of the plateau from the Andeh-Koh. About a thousand feet of steep descent, down a track worn by the feet of pilgrims, leads to the entrance of a gorge, whose aspect is singularly adapted to impress the imagination of the pilgrim to these sacred hills. A dense canopy of the wild mango trees, overlaid and interlaced by the tree-like limbs of the giant creeper, almost shuts out the sun; strange shapes of tree ferns and thickets of dank and rotting vegetation cumber the path; a chalybeate stream, covered by a film of metallic scum, reddens the ooze through which it slowly percolates; a gloom-like twilight shrouds the bottom of the valley, from out of which rises on either hand a towering crag of deep red colour, from the summit of which stretch the ghastly arms of the white and naked *Sterculia urens*, a tree that looks as if the megatherium might have climbed its uncouth and ghastly branches at the birth of the world. Further on the gorge narrows to a mere cleft between the high cliffs, wholly destitute of vegetation, and strewn with great boulders. Climbing over these, and wading through the waters of a shallow stream, the pilgrim at length reaches a cavern in the rock, the sides and bottom of which have been, by some peculiar water action, worn into the semblance of gigantic matted locks of hair; while deep below the floor of the cavern, in the bowels of the rock, is heard the labouring of imprisoned waters shaking the cave. It is small wonder that such a

'natural marvel as this should be a chosen dwelling place for the god to whom all these mountains are sacred, and that it forms one of the most holy and indispensable points in the circuit which the devout pilgrim must perform.'

Most of the good view points have been named, and Points of view. access to them facilitated by the construction of paths. The accompanying map will indicate their whereabouts. Taste in such matters must naturally differ, but perhaps the best views of the plateau itself can be obtained from Lansdowne Hill, which is marked by a monument to commemorate the visit of Lord Lansdowne when Viceroy, and from the top of the ancient caves. Of the *khuds*, Hāndi Kho and Jambudwip, described above, are the most striking, while Waters Meet and Saunders Pool, which combine the beauties of rock and water scenery, are the most picturesque. A fine view over the Nerbudda valley can be obtained from the Piparia road above the little hamlet of Bāriām, and Clematis Point and Colleton Crag command equally magnificent prospects of the hills and valleys of the Chhindwāra jāgirs. Good waterfalls are not numerous, and except in the rains the flow of water is nearly always small, but the surroundings of Big Fall are in themselves sufficient to redeem it from insignificance, while Bee Fall is at any time well worth a visit. An interesting and easy excursion can be made to the sacred cave and shrine of Mahādeo, at the foot of Mahādeo hill;¹ the way lies through charming woodland scenery, and commands striking views of crag and ravine. Of the surrounding peaks, Dhūpgarh (4454 feet), the highest summit of the Sātpurā range, is much the most frequently ascended. A dāk-bungalow has been built a short distance from the top, and two bridle paths have been constructed to it; the view to the west, looking over the Borī valley and the Betūl hills, is especially beautiful at sunset, or in the early morning before sunrise. The precipitous Chaurāgarh or Chaurādeo (4317 feet) is a somewhat arduous ascent, but

¹ See Mahādeo.



Benrose, Collo., Derby.

WATERS MEET, PACHMARHI.

the scenery is more rugged and imposing, while the pilgrims' path to the sacred summit, crowned with the emblems of Mahādeo's worship, has an interest of its own. But perhaps the finest of all the views to be obtained in the vicinity of Pachmarī is that from Mahādeo (4384 feet), which is easily climbed by a direct but little-known route. On one side rise the crags of Chaurāgarh, and on the other the splendid scarps of Dhūpgarh ; far below lies the green Denwā valley, backed by the sunny hills and dales of Chhindwāra ; to the north are the woods and the plateau of Pachmarī ; and beyond this the broad level plain of the Nerbudda, broken only by the hills of Fatehpur and the north Denwā forests, melts away into the shadowy outline of the Vindhyan mountains. There are many lesser peaks around Pachmarī. Some are not easily accessible, and progress is often barred by an unexpected and impassable *khud*. The rock of the Pachmarī hills is rough and well weathered, and offers some tempting work for the cragsman. But there is no record of any climbing ever having been attempted, and it is probable that the extreme brittleness of some of the rock would be a source of considerable danger.

The administration of Pachmarī is peculiar, and has sometimes given rise to misunderstandings. The gradual growth of its constitution has been sketched in the following note, compiled in 1906 by the Honourable Mr. J. O. Miller, at that time Chief Commissioner :—

The history of Pachmarī as a sanitarium is briefly as follows. The place was first visited with a view to permanent occupation by a Forest Officer in 1862. He built a house there and a few years later a garden was started and an unsuccessful attempt made to introduce cinchona cultivation. In 1869 it was decided to utilise the place as a local sanitarium. An area of 662 acres was taken up at the expense of the Local Committee of Hoshangābād, a bungalow was built at Singanāma, and a road made, so that by the end of 1870 carts were

able to reach the plateau. Over half a lakh of rupees were spent in the preliminary measures for developing the place. Its advantages seem at the same time to have been realised by the military authorities, and in 1870 a proposal to establish a military station here was mooted, and so strongly supported that in December of that year the Government of India authorised its immediate occupation by 200 men from Saugor and Kamptee as an experimental measure. The experiment was evidently regarded as being on the whole a success, since in the following May (1871) peremptory orders were received that certain lands marked out on a sketch should be taken up at once. It was directed that demarcation and all preliminaries to the acquisition should be completed within a fortnight. Two months later there was talk of a railway being made, and the advantages of the place were thought to be such that amongst the many schemes submitted was one which contemplated the occupation of the plateau by a brigade consisting of two regiments of infantry, one of cavalry, and a battery of artillery. The total area taken up was about 15,000 acres. I cannot find a definite statement of the compensation paid. The *jāgīrdār* claimed some Rs. 84,000, but the actual amount seems to have been below Rs. 30,000, though this is not clear. It was supposed that the plans of the military authorities would be interfered with by the small area taken up by the civil authorities, and there was much correspondence as to how this area should be dealt with. One proposal was that the civil population should be relegated to Dhūpgarh, but this was declined. It was decided eventually that a portion of the east end of the civil station should be given up to cantonments, and compensation be given to the civil station further west, and apparently this proposal was carried out, though only a very close comparison of existing boundaries with old maps would enable one to say what was actually done. In 1874 the Government of India decided to place "the remainder of the plateau" under the jurisdiction of a special committee appointed by the Chief

Commissioner. There was some doubt whether the above words excluded the cantonment only from the jurisdiction of the special Committee, or excluded both cantonment and civil station. The Local Government took the latter view, which appears to have been acquiesced in, though no final decision was ever given. The exclusion of both cantonment and civil station would have left the Committee, which came to be known as the Plateau Committee, with nothing but a large area of ravines to administer, and in practice it extended its jurisdiction over lands falling both in the cantonment and in the civil station. In April 1876 the boundaries of the cantonment were defined by notification. They were altered in 1879, but the alterations do not seem to have been of much importance. The total area taken up for cantonments is stated in the papers to amount to nearly five square miles. In May 1876 the Plateau Committee was formally constituted, and in July the Cantonment Act (XXII of 1864) was applied. The difficulty of managing the civil station without definite legal powers made itself felt in time, and in April 1886, with the sanction of the Government of India, an area corresponding roughly, but not exactly, to the civil station was brought under the Municipal Law. It shows how little was then known of the Plateau Committee, that Government was of opinion that it had practically ceased to exist. On enquiry being made, however, it was found not only that the Committee existed, but that it was in regular working order, and had extended its control beyond the limits assigned to it. In 1894 this question of the jurisdiction of the Plateau Committee again came up. It was found then to be dealing with various forests within the limits of cantonments, and it was pointed out that the area notified as cantonments was so preposterously large that if it were excluded from the jurisdiction of the Plateau Committee, that Committee would have little to do. It was conjectured at the time that one reason for taking up so large an area as cantonments was that at the outset it was thought possible that a

large area of forest might have to be felled and cleared in the interests of the health of the troops. But no such explanation is necessary if we recollect that at the start it was thought possible that Pachmarhi might suffice for a full brigade. In 1896 an exhaustive precis of the correspondence on the administration of the plateau was drawn up by Mr. L. K. Laurie I.C.S. He pointed out how the Plateau Committee had always shown a tendency to exercise authority over areas in cantonments and the civil station, going so far as to look after the lighting of the civil station, and he suggested its abolition. Accordingly the proposal was made to the Government of India that the Committee should be abolished and the limits of the municipality extended to the whole of the plateau, except such part as was included in cantonments. "The common working of the cantonment and municipality would," it was said, "be effected by means of a Joint Committee appointed under section 18 of the Municipal Act." This proposal was accepted by the Government of India, and on April 30th, 1898, a notification was issued including the whole of the non-cantonment area of the plateau in municipal limits. With the consent of the military authorities it was then decided to delegate the control of the forest areas, both in the municipality and the cantonment, to a Joint Committee, composed of members of the Cantonment and Municipal Committees, and rules for the control of the areas under the Joint Committee were drawn up.

The Joint Committee, of which the Director of Agriculture is president, now acts as an advisory body to the Municipal and Cantonment Committees, and submits after consideration all matters involving expenditure which arise in the area under its control, to the Committee concerned for approval. The funds at the disposal of the Cantonment Committee are small, and its sphere of activity is practically limited to the inhabited part of the Cantonment. All Government grants which form the chief revenue of Pachmarhi are made to the Municipal Committee, and this body is really

the ultimate director of Pachmarī affairs. It is presided over by the Commissioner of the Division and its membership is purely official, including the Director of Agriculture and the chief District and cantonment officers. Its revenue and expenditure, which are detailed in Chapter IX, are considerable. As, however, from the nature of its constitution, meetings can rarely be held, wide executive powers are delegated to different individual members. Thus the polo ground and the public garden are in the charge of the Director of Agriculture. The Divisional Forest Officer manages the forests, according to a working plan drawn up by Mr. A. F. Caccia I.F.S. in 1895. Roads and buildings are supervised by the Executive Engineer. And the *tahsildār*, who is Secretary both of the Joint and Municipal Committees, is responsible for all matters of ordinary routine, acting under the direction of the Assistant Commissioner in charge of the plateau. Recently it has been found that this plan has not been sufficient for the adequate control of the forests, which form the larger part of the sanitarium area, and the advisability of strengthening the hands of the Forest Officer by enforcing some of the provisions of the Forest Act has had to be considered.

Public buildings are numerous. In the municipal area the most important are the Chief Commissioner's Residency, the tahsil offices and Assistant Commissioner's court, the club and hotel, the European hospital and nurses' quarters, the civil and veterinary dispensaries, the circuit houses, and the inspection bungalow for the use of District officers. In the cantonment are the cantonment offices, the barracks, the military hospital, and the mess houses for the officers of the Dépôt and of the Musketry class. Pachmarī has a police Station-house and a post and telegraph office. There is a convent school for European girls; and in the cantonment an anglo-vernacular school for boys, and two vernacular schools for girls. There is also a cattle pound. Among other features of Pachmarhi

may be mentioned the rifle ranges, the race course and polo ground, the public garden, which supplies good English vegetables, and the golf links. There are two excellent circular roads, known as the Long and Short Chakkars, while bridle and foot-paths lead in almost every direction. The water-supply is derived from wells, and good water can be obtained almost anywhere in the sandstone rock, at a short distance below the surface.

Pagdhāl.—A village in the Seoni tahsil, situated on the Great Indian Peninsula Railway, 8 miles west of Seoni town. Population 600. Considering its small size, Pagdhāl has a considerable export trade in grain and forest produce, which are brought from the neighbouring villages and forests for despatch from the railway station. For the five years ending 1906, the average rail-borne exports were nearly a lakh of maunds a year or 4 per cent. of the total exports of the District. A weekly bazar is held on Fridays. Pagdhāl has a police Station-house, a primary school for boys, and a branch post office.

Pamli.—A small village of the Sohāgpur tahsil, 7 miles north-west of Sohāgpur, at the junction of the Palakmatī river and the Nerbudda. Near by is a sacred grove, called Pāndodip, which belongs to the mālguzār of Pāmli. The Pāndavas are supposed to have made a horse sacrifice here, and near the banks of the Nerbudda ashes are said to be found to a depth of 10 feet. There is also an old temple and image of Mahādeo. Two small fairs are celebrated here, the one at the full moon of Kārtik, and the other at Til Sankrānt. About 2000 people assemble to bathe and collect ashes. There is a small weekly market on Tuesdays, at which ordinary articles of food are sold.

Piparia.—Or Deogaon, generally known as Posār, is a large and important village in the Sohāgpur tahsil, 11 miles east of Sohāgpur. Population 1900. Commercially, Piparia is by far the most important place in the tahsil. Besides being favourably situated on the Great Indian Peninsula

Railway, it has the advantage of being the centre of an important system of roads.¹ During the five years ending 1906 the average annual exports amounted to 372,000 maunds or 15 per cent. of the total exports of the District, while imports during the same period averaged 151,000 maunds a year or 16 per cent. of the total imports of the District. Alike in the export and import trade, Piparia is only surpassed by Hardā and Itārsi among the towns and villages of the District. Grain is the most important article of export, and in addition to the many trading firms of Cutchis, Bhātias and Mārwāris, Messrs. Ralli Brothers have an agent here. Oilseeds, cotton and forest produce are also exported in considerable quantities. Imports are swollen by the requirements of the civil and military station of Pachmarhi, for which Piparia is the railway station. A weekly market is held on Sundays. A ginning factory was established here by Rājā Gokuldās of Jubbulpore in 1905; and now receives considerable quantities of cotton, chiefly from Bhopāl. Piparia has a large dāk-bungalow, and there is also a good *sarai*, built in 1883 by Rānī Umed Kuar of Fatehpur-Nadipurā. There is a police Station-house, a primary school for boys, and a cattle pound. The post office is an important one, and a line of mail motors and tongas, under the control of the post office authorities, runs from here to Pachmarhī. There is also a telegraph office. During the Pachmarhī season a Hospital Assistant is often stationed here on special plague duty. A co-operative credit society was established at Piparia in 1905.

Powarkhera.—A small village in the Hoshangābād tahsil, 4 miles south of Hoshangābād. Its area is 1000 acres. Of this, nearly 500 acres has been acquired as a Government Farm, which was started in 1903 under the control of the Agricultural Department. About half the farm is cultivated, while the remainder is pasture land. Some 40 acres of the

¹ See para. 168.

cultivated area are devoted to agricultural experiments, and the remainder is utilised to raise a good stamp of grain for distribution as seed to cultivators. Experiments are made to ascertain the value of various kinds of manure, different systems of tillage and *kāns* eradication, irrigation, rotation, and so on. Agricultural implements and machinery are also tested, and the use of such as are found suitable is demonstrated at the principal fairs by officers of the Department. On the uncultivated area a cattle-breeding farm has been established with the object of improving the District stock. Bulls bred from the Powārkherā herd are lent to mālguzārs, on certain easy conditions, for stud purposes.

Rahatgaon.—An important village in the Hardā tahsil, 9 miles south of Timarnī railway station and 11 miles south-east of Hardā. Population 1500. In the 18th century, the Rājā of Saoligarh, who ruled over part of Seoni and Hardā, had a subordinate officer established here. It is now the headquarters of the Rājaborāri forest range, and is one of the most important timber markets in the District. There is also a cattle registration market of some size, held on Sundays. In 1905-06 some 2000 cattle were sold here, fetching nearly Rs. 30,000. The range office, police station-house, cattle pound, primary school and post office are the chief institutions. A town fund for sanitation is raised from the registration fees on cattle, which are levied at the rate of 3 pies per rupee.

Raipur.—A large village in the Hoshangābād tahsil, 4 miles east of Hoshangābād, on the left bank of the river Tawā. Population 2100. A weekly market is held on Sundays. There is some local industry in weaving. The village has a primary school and a post office. Botālai, a hamlet of Raipur, is celebrated as the home of Rāmji Bābā, the patron saint of Hoshangābād. His means of livelihood was the sale of tobacco. Usually pre-occupied with prayer, he permitted customers to help themselves; and it is said that if any one was so dishonest as to take too much, the tobacco

was miraculously reduced to its proper weight. Rain, too, never fell on the wares exposed for sale. His temple at Hoshangābād is frequented by pilgrims from great distances.

Raisalpur.—A large village in the Hoshangābād tahsil, 7 miles south of Hoshangābād. Population 1600. The plain of Raisalpur is one of the most fertile in the District, and its wheat is famous. The village was formerly of some importance as the centre of a considerable estate, which was acquired by the ancestors of the present mālguzārs in the time of the Bhonsla Rājās. The mālguzārs still bear the title of Chaudhari conferred on the family by the Bhonsla, but the estate is much reduced. At the time of the Pindāri raids Raisalpur was the headquarters of a band of Pindāris who ravaged the surrounding country. The importance of the village now is purely agricultural. Its market, overshadowed by Itārsi, has ceased to exist. It has a primary school and a post office.

Rajaborari.—An extensive tract of hill and forest in the south-east corner of the Hardā tahsil. The bulk of the Rājāborāri tract is now a Government reserve, and is included in the forest range of the same name.

Sandia.—An important market village in the Sohāgpur tahsil, situated at a ford of the Nerbudda, 11 miles north of Piparia railway station. Population 1500. The Anjan river, which rises in the Fatehpur hills, joins the Nerbudda here, and at the confluence there is a temple to Shāndilya Rishi, who spent his life here, and from whom the village, Sāndia or Shāndilyapura, takes its name. The Pāndava brothers are believed to have rested near the ford and cooked their food there. Sāndia is connected with Piparia by a first-class metalled road, and the exports of eastern Bhopāl cross the Nerbudda here and are carted down this road to the railway. There is a weekly market on Fridays, which is of considerable importance. Market dues are levied to pay the cost of sanitation. Sāndia is also an emporium for Mālwī and other cattle. In 1905-06, 2000 cattle were sold here fetching

Rs. 30,000 ; and a registration fee of 3 pies in the rupee is taken. Sāndia has a primary school for boys and a branch post office. In former times this tract was much exposed to raids of dacoits from Central India, and the sentry posts for mounted police are still to be seen along the bank. It was here that Tantia Topi crossed the Nerbudda on his way to the Sātpurās in 1858.

Sangakhera Kalan.—A large village in the Hoshangābād tahsil, 6 miles east of Hoshangābād, on the right bank of the river Tawā. Population 2700. A weekly market is held on Thursdays. The village has a small leather industry. The population is largely made up of Mālis and Kirārs, who grow chillies and other garden crops on irrigated land. There is a primary school, a cattle pound and a post office.

Sangakhera Khurd.—A village in the Hoshangābād tahsil, lying on the bank of the Nerbudda, 20 miles east of Hoshangābād. Population 1100. The road from Semri Har-chand to Bhārkach in Bhopāl State crosses the Nerbudda here. A weekly market is held on Wednesdays; market dues of one pice a shop are levied by the mālguzār. The population includes many Mehrā weavers. A cattle pound, primary school, and post office, are established here.

Satpura Hills.¹—A range of hills in the centre of India.

Geographical position.

The name, which is modern, originally belonged only to the hills which divide the Nerbudda and Tāpti valleys in Nimār, and which were styled the *sāt putrā* or seven sons of the Vindhyan mountains. Another derivation is from *sāt puṇā* (seven folds), referring to the numerous parallel ridges of the range. The term Sātpurā is now, however, customarily applied to the whole range, which, commencing at Amarkantak in Rewah, Central India ($22^{\circ} 40' N.$, $81^{\circ} 46' E.$), runs south of the Nerbudda

¹ This article is abridged from the draft article for the Imperial Gazetteer.

river nearly down to the western coast. The Sātpurās are sometimes, but incorrectly, included under the Vindhya range. Taking Amarkantak as the eastern boundary, the Sātpurās extend from east to west for about 600 miles, and in their greatest depth exceed 100 miles from north to south. The shape of the range is almost triangular. From Amarkantak an outer ridge runs south-west for about 100 miles to the Sāletekri hills in the Bālāghāt District, thus forming as it were the head of the range, which shrinking as it proceeds westward from a broad tableland to two parallel ridges ends, so far as the Central Provinces are concerned, at the famous hill fortress of Asīgarh. Beyond this point the Rājpipla hills, which separate the valley of the Nerbudda from that of the Tāpti, complete the chain as far as the Western Ghāts. On the table-land comprised between the northern and southern faces of the range are situated the Districts of Mandlā, part of Bālāghāt, Seoni, Chhindwāra and Betūl.

The superficial stratum covering the main Sātpurā range is trappean, but in parts of all the Districts of the Central Provinces

Geological formation. which it traverses, crystalline rocks are uppermost, and over the Pachmarī hills the sandstone is also uncovered. In Mandlā the higher peaks are capped with laterite. On the north and south the approaches to the Sātpurās are marked as far west as Turanmāl by low lines of foot-hills. These are succeeded by the steep slopes leading up to the summit of the plateau, traversed in all directions by narrow deep ravines hollowed out by the action of the streams and rivers, and covered throughout their extent with forest.

The highest peaks are contained in the northern range.

Heights. rising abruptly from the valley of the Nerbudda and generally sloping down to the plateau, but towards the west the southern range has the greater elevation. Another noticeable feature is a number of small tablelands lying among the hills at a

greater height than the bulk of the plateau. Of these Pachmarī (3530 feet) and Chikaldā in Berār (3664 feet) have been formed into hill stations, while Raigarh (2200 feet) in the Bālāghāt District and Khāmla in Betūl (3700 feet) are famous grazing and breeding grounds for cattle. Dhūpgarh (4454 feet) is the highest point on the range, and there are a few others of over 4000. Among the peaks that rise from 3000 to 3800 feet above sea-level, the grandest is Turanmāl (Bombay Presidency), a long, rather narrow tableland 3300 feet above the sea and about 16 square miles in area. West of this, the mountainous land presents a wall-like appearance both towards the Nerbudda on the north and the Tāpti on the south. On the eastern side the Tāsdīn Valī (Central India) commands a magnificent view of the surrounding country. The general height of the plateau is about 2000 feet.

Semri Harchand.—A large village in the Sohāgpur tahsil, situated on the Great Indian Peninsula Railway, 7 miles west of Sohāgpur. Population 1700. The agriculture of Semri suffered very severely in the famines, but it is now acquiring a considerable export trade in grain from Bhopāl and in forest produce from the south. In 1902, the rail-borne exports were only 44,000 maunds, but the average for the four succeeding years was 150,000 maunds, or 6 per cent. of the total exports of the District. Messrs. Ralli Brothers have an agency here for the export of wheat. There is a weekly market on Mondays. Semri has a vernacular middle school and a cattle pound.

Seoni-Malwa Tahsil.—The smallest tahsil of the District, lying between $22^{\circ} 13'$ and $22^{\circ} 39'$ N., and $77^{\circ} 13'$ and $77^{\circ} 44'$ E., and flanked on the east by the Hoshangābād tahsil and on the west by Hardā. Its area is 490 square miles, or about one-eighth of the total area of the District. Its population in 1901 was 66,793, or 15 per cent. of that of the District, giving a density of 136 per square mile. In 1891, the

population was 75,901, and in 1881, 54,058. Like the rest of the District, the Seoni tahsil falls naturally into two divisions of forest-clad hill and fertile valley. But the hills to the south cover proportionately a smaller area than in other tahsils, while the black soil plain extends right up to their foot. Practically the whole tahsil is given up to the cultivation of spring crops, especially wheat; and except along the Nerbudda, where the land is cut up by ravines, and on the banks of a few streams which descend from the hills, the soil is all of exceptional fertility. Seoni itself is the only town in the tahsil. Of the 215 villages named in the village lists, Shohpur is the most important, and there are five others with a population of over 1000.

Agriculture. There are no special characteristics distinguishing the agriculture of this tahsil from that of the District as a whole, which is fully described in chapter IV. Of the total area of the tahsil, in 1905-06, 126 square miles or 26 per cent. were under Government forest, comprising the Seoni range, while 73 square miles were covered by tree forest, scrub jungle and grass in private hands. A total of 190,000 acres or 75 per cent. of the village area was occupied for cultivation, and 135,000 acres were under crop. The statistics of the principal crops in recent years are shown in the following statement:—

Year.	Wheat.	Gram.	Kodon Kutki.	Juär.	Tar.	Til.	Cotton.	Total cropped area.
Settlement of 1891-96	80,976	2,217	3,768	2,437		3,492	not avail- able	117,881
1900-01	59,759	14,015	4,261	17,998	4,860	14,776	2,920	137,518
1904-05	82,039	8,084	1,983	2,264	2,305	14,376	4,126	183,847
1905-06	88,196	6,000	1,989	1,817	3,340	14,704	5,218	134,936

Land revenue. At the thirty years' settlement the land revenue demand was Rs. 64,000, which fell at 46 per cent. of the assets. It was raised at the settlement of 1891-96 to Rs. 1.07 lakh, giving an increase of

Rs. 43,000 or 67 per cent. on the revenue immediately prior to revision. The revised revenue fell at 49 per cent. of the assets, which amounted to Rs. 2·21 lakhs. The cash rental increased from Rs. 1·13 to Rs. 1·57 lakhs. The total demand for land revenue and cesses in 1905-06 was Rs. 1·35 lakh.¹ At the settlement of 1891-96 the following assessment groups were formed, the number of villages contained in them being shown in brackets against each:—Nerbudda-Ganjāl group (33), Havelī (65), and Nandarwāra-Lokhartalai (53). Several villages of the Seoni tahsil are, however, included in the Nerbudda, Khapariā and Zamāni groups of the Hoshangābād tahsil. The average rent-rate per acre for the tahsil was R. 1-6-10, as against R. 1-0-1 at the thirty years' settlement, and the revenue rate was R. 0-14-2. The Seoni-Havelī group has a rent-rate of R. 1-10-5, which is the highest in the District; that of the Nerbudda-Ganjāl group is R. 1-4-9, and of the Nandarwāra-Lokhartalai group R. 1-1-11.

The tahsil is divided into two Revenue Inspectors' circles with headquarters at Satwāsa and Miscellaneous. Pagdhāl, and 46 patwāris' circles. It has two police Station-houses at Seoni and Pagdhāl.

Seoni-Malwa Town.—The headquarters town of the General description. Seoni-Mālwa tahsil, situated in 22° 27' N. and 77° 29' E., on the Great Indian Peninsula Railway, 442 miles from Bombay and 33 miles from Hoshangābād by rail via Itārsi. The town lies 27 miles to the south-west of Hoshangābād, with which it is connected direct by the old Bombay road. Five villages are included in the municipal area, namely, Bānapurā, from which the railway station takes its name, Burhānpurā, Bhilpurā which was formerly inhabited by Bhils, Barākhar, and Seoni. The total area is 4287 acres, of which 107 acres, excluding roads, are *nazūl* or Government

¹ The increase is due to the readjustment of the Seoni and Hoshangābād tahsil boundaries.

land, and the remainder mālguzāri. Its population in 1872, when it was the most important commercial town in the District, was 7579, and its further expansion was said to have been only checked by the difficulty of acquiring building land. During the next 20 years the population diminished somewhat as trade declined, and in 1891 was only 6779, but it has now recovered its former proportions, being returned in 1901 as 7531. Seoni was created a municipality in 1867. Its administration is described in chapter IX. The water-supply is derived from wells. Street-lighting was started in 1906.

There was a town of Seoni in the time of Akbar, but no old buildings now exist. The present

Historical.

town dates from the conquest of the surrounding country by Raghujī Bhonsla of Nāgpur, about 1750 A.D. A Marāthā Amil resided here, and a fort was built, under the protection of which a town grew up. In 1803 the fort was taken by Wazīr Muhammad of Bhopāl, from whose Amil it was captured two years later by Daulat Rao Sindhia in his retreat up the valley after the defeat of Assaye. Daulat Rao held Seoni for three years, and in 1808 restored it to Nāgpur. When this territory was occupied by the British in 1818, Seoni was distinguished as the only place where any resistance was made, the *amil*, Khando Pandit, considering it a point of honour not to yield the fort until a force had been sent against it and a few shots fired. The fort which occupied the site of the present tahsil office, was subsequently sold for Rs. 100, and dismantled to provide stone for railway construction.

Seoni was formerly the chief mercantile town in the

Trade and local industries.

Hoshangābād District, and probably in the whole of the Nerbudda valley. Its

merchants were chiefly engaged in the export of cotton, but there was also a considerable grain market, while English cotton fabrics, metals and spices were largely imported. With the rise of Hardā and Itārsi

the commerce of Seoni declined. The cotton trade is now practically extinct, but large quantities of grain are still exported, and imports are considerable. The Seoni market is the centre for the exports and imports of a number of rich villages, which are connected with it by fair-weather tracks. During the five years ending 1906, rail-borne exports averaged $2\frac{1}{2}$ lakhs of maunds a year, or 10 per cent. of the total exports of the District, while imports averaged 85,000 maunds, or 9 per cent. of the total imports. Both in its exports and imports Seoni stood fourth amongst the towns of the District, being only surpassed by Itārsi, Hardā and Piparia. The chief local industries are the growing of *pīpar* (*Piper longum*), which is exported as a medicine, and of *pān* or betel. The *pān* gardens of Bānapurā have a good local reputation, growing a special kind of leaf.

The principal public buildings are the tahsil office, the town hall, which has been built at different times at a total cost of about Rs. 3000, the range office of the Seoni forest range, the bonded warehouse for country liquor, the dispensary, the police Station-house and the post and telegraph office. There is an inspection bungalow near the station, and also a *sarai*. The town has an English middle school, with a hostel for boarders attached, a branch primary school and a primary school for girls. The "Friends' Mission also supports a vernacular middle school for boys, a primary school for girls and an orphanage, in connection with which a training farm for teaching agriculture has been established at the village of Lehi, 12 miles south of Seoni.

Shohpur.—A large village in the Seoni tahsil, 11 miles north-west of Seoni town. Population 2300. It is the chief village of the estate of the late Rao Bahādur Nirbhāi Singh Mandloī, who died in 1907. The village of Shohpur, which is the largest in the tahsil, is maintained in excellent order. The roads are good, and are planted with avenues. The streets are lighted, and sanitary arrangements are

satisfactory. Market dues are levied to meet the cost of conservancy and improvements, but the late proprietor's private expenditure was large. He also built a *sarai*, a school and a bazar, and laid out a picturesque encamping ground for Government officers. The weekly market, which is held on Wednesdays, is the most important in the tahsil, and there is a primary school for boys and a post office.

Sobhapur.—A large and important village in the Sohāgpur tahsil, 6 miles north-east of Sohāgpur. Population 4000. Sobhāpur is the principal village of a large estate of 74 villages, belonging to a family of Gond Rājās.¹ A number of important firms of moneylenders have made Sobhāpur their residence, attracted by the presence of the Rājās and by the importance of the bi-weekly market. There is a considerable weaving industry here. The weavers, who number about 100 households, are mostly Katias, though there are also a few houses of Kotwārs. The Katias can make fine cloth for turbans as well as the ordinary country cloth. There are also a few houses of Rangrez, or dyers, and of Chhipas, who both dye and print. Ropes of *baber* grass are made by Kanjars. A few Kaserās make cheap ornaments of *kaskut* (a mixture of copper and zinc). Sobhāpur is well situated as a centre for trade. It is the most important village in a large and fertile tract of country, while communications with the outer world are good. There is a bi-weekly market, held on Tuesdays and Saturdays. The Saturday market is the most important in the tahsil. Sales of cattle, which are registered, are considerable ; in 1905-06 more than 6000 head of stock of all kinds were sold, realising over a lakh of rupees. Sobhāpur is also becoming a cotton emporium of some importance. Besides the local supply, considerable quantities are brought here from Bhopāl for sale, and are despatched by merchants to the ginning factories at Piparia, Jubbulpore or Hardā. At the time of the thirty years' settlement Sobhāpur was described by the Settlement Officer as the great

¹ See para. 99.

entrepot for the trade in country cloth, and there is still a large sale both of native and of imported goods. Market dues are levied to pay for sanitation and village improvements. All the principal articles sold are so taxed, with the exception of cotton, which has only recently become important. The village, which with the rest of the Sobhāpur estate has been for some time under Court of Wards' management, is well kept and well laid out. The principal streets are metalled, and the cattle market is paved. The Rājā's house has a good walled garden, with a stone bathing tank, and another flower and vegetable garden has been laid out near the Piparia road. Avenues have been planted along the chief roads leading to the village. Sobhāpur has a vernacular middle school, a primary school for girls, a cattle pound, a *sarai*, a branch post office and a telegraph office. Its chief need now is a good tank, at which the cattle brought for the weekly market could be watered. An attempt was made to supply this need as a famine work in 1897, but the site was not well chosen.

Sodhalpur.—A large village in the Hardā tahsil, situated 4 miles south of Timarnī railway station and 9 miles east of Hardā, at the junction of the roads from Betūl and Rahatgaon to Timarnī. Population 1700. The majority of the cultivators are Gūjars, and a co-operative credit society for members of this caste was established in 1905. A fair is held here on the full moon of Aghan in honour of Kāna Bābā, a Gūjar devotee, whose tomb is here. The village has a primary school and a post office.

Sohagpur Tahsil.—The eastern tahsil of the District lying between 22° 10' and 22° 59' N. and General description. 77° 55' and 78° 44' E. Its area is 1243 square miles, or about one-third of the whole District. Of this, 173 square miles lie in the jāgirs of Chhāter, Bāriām-Pagārā and Pachmarhī, which cover the south-east corner of the tahsil. The population was returned in 1901 as 125,863, including 3659 in the jāgirs, or 28 per cent. of that of the

District. In 1891 it was 139,936, and in 1881, 135,765. Sohāgpur is the most thinly populated tahsil in the District, the density per square mile being 101. But the sparsely peopled jāgīrs, where the density is only 21 per square mile, and the wide stretch of Government forest are responsible for this. The valley proper is populated as thickly here as elsewhere. The northern portion of the tahsil is an undulating plain, much scoured by the action of the numerous streams flowing down from the hills to the Nerbudda, and often studded with mahuā trees, which flourish in the sandy soil. A range of forest-clad hills separates the valley of the Nerbudda from that of the Denwā, and south of this rise the masses of the Mālni and Mahādeo hills, culminating to the south-east in the Pachmarī plateau. South of Bankheri, again, are the hills of Chhāter and Fatehpur. The Sohāgpur tahsil is the poorest in the District. Except around Pachlaorā and Sobhāpur, where the fertility of the land is unsurpassed, little of the deep black soil, which is characteristic of the Hoshangābād valley, is to be found. Not only is the area covered by hill and forest much larger than in other tahsils, but the valley itself is intersected with innumerable rivers and nullahs, which scour away the finer particles of the soil and bring down large deposits of sand from the Mahādeo hills. On the other hand, the land bordering on the Nerbudda is not cut up by ravines to the same extent as in the western tahsils, and some of the best soil in the tahsil is to be found close to the river bank. There are two towns in the tahsil, Sohāgpur and Pachmarī, and according to the village lists 456 villages, of which Sobhāpur and Bankheri are the largest, while 9 others have a population of over 1000.

The system of agriculture is generally similar to that of the rest of the District, except that the Agriculture. methods pursued are rougher. The proportion of poor soil being larger, the autumn crops are more important than elsewhere; but no special attention

is paid to their cultivation and broadcast sowings are the rule. Here, as throughout the valley, wheat is the chief staple crop. It is sown much thicker than in the west, the recognised proportion being 1 *kachchā māni* (432 lbs.) to four acres. Notwithstanding, the outturn per acre is undoubtedly lower. This may be ascribed partly to the inferiority of the soil, and partly to bad cultivation. Irrigation is practised to some extent on the banks of the Dudhī river and the Anhoni and Kubjā nullahs as well as from *kachchā* wells, which are dug every year in the sandy soil. The crop irrigated is usually wheat, and successful results are obtained. There can be little doubt that irrigation works on a larger scale would greatly benefit the agriculture of this tahsil. Fields are also embanked more often here than in the west. Owing to the poverty of the soil, continuous cropping with wheat is not so common as in the west. Some sort of rotation is often recognised, and on any indication of drought gram and wheat-gram are largely substituted for wheat. Of the total area of the tahsil, in 1905-06, 433 square miles or 35 per cent. were under Government forest, comprising the Bori and Sohāgpur ranges, while 249 square miles were covered by tree forest, scrub jungle and grass in private hands. A total of 304,000 acres or 62 per cent. of the village area was occupied for cultivation, and 229,000 acres were under crop. The statistics of the principal crops are shown in the following statement:—

Year.	Wheat.	Gram.	Kodon Kutki.	Juar.	Tur.	Til.	Cotton.	Total cropped area.
Settlement. of 1891-96	112,927	15,904	22,074		15,098	39,720	not avail- able.	247,038
1900-01	52,584	38,914	35,770	38,648	6,950	17,021	2,282	211,586
1904-05	81,436	44,484	36,430	18,829	4,772	17,486	4,015	281,503
1905-06	90,218	37,455	38,596	15,344	4,634	17,755	2,847	229,493

The land revenue demand at the thirty years' settlement was Rs. 98,000, which fell at 46 per cent. of Land revenue. the total assets. It was raised at the settlement of 1891-96 to Rs. 1·74 lakh, giving an increase of Rs. 76,000, or 73 per cent. on the revenue immediately prior to revision. The revised revenue fell at 47 per cent. of the assets, which amounted to Rs. 3·70 lakhs. The cash rental increased from Rs. 1·59 to Rs. 2·63 lakhs. The demand for land revenue and cesses in 1905-06 was Rs. 1·7 lakh. At the settlement of 1891-96 the following assessment groups were formed, the number of villages contained in each being shown in brackets against it :—Dudhi (89), Sobhāpur-Pachlaorā (64), Piparia-Hathwāns (55), Sohāgpur (66), and Jungle group (94). The average rent-rate per acre for the tahsil was R. 1-3-3 as against R. 0-13-11 at the thirty years' settlement, while the revenue rate was R. 0-10-9 per acre. The Sobhāpur-Pachlaorā group has the highest rent-rate with R. 1-9-2, the other groups being Sohāgpur R. 1-4-11, Dudhi R. 1-2-8, Piparia-Hathwāns R. 1-2-1 and Jungle R. 0-12-1.

The tahsil is divided into three Revenue Inspectors' circles with headquarters at Semri, Miscellaneous. Piparia and Bankheri, and 64 patwāris' circles. It has four police station-houses, at Pachmarī, Bankheri, Piparia and Sohāgpur.

Sohagpur Town.—(22° 4' N. and 78° 12' E.). The head-quarters town of the Sohāgpur tahsil, General description. situated on the Great Indian Peninsula Railway, 494 miles from Bombay. It is 32 miles east of Hoshangābād, and can be reached direct by the old Bombay road, or by rail via Itārsi, a distance of 42 miles. The total area of Sohāgpur is 2500 acres, of which 166 acres are *nazūl* or Government land, and the remainder *mālguzāri*. The old *mālguzārs* were a family of Jijhotia Brāhmans, who are said to have held the office of Kānūngō under the

Marāthās. The present proprietor is Rājā Gokuldās of Jubulpore. The river Palakmatī, the waters of which are considered to have qualities valuable for the local industry of dyeing, runs through the centre of the town; it is liable to rise rapidly in the rains and flood the low-lying houses. The population has remained singularly constant during the last 30 years, only varying from 7000 to 7500; in 1901 it was returned as 7420. The majority are Hindus, but there is also a fair proportion of Muhammadans, who numbered nearly 2000 in 1901. Sohāgpur was created a municipality in 1867. Its administration is described in chapter IX. A sufficient water-supply is obtained from wells, and very little has been spent on improving it.

Sohāgpur is a very ancient town. It has been suggested that it is the mythological Shonitpura or

Historical. “city of blood” where Bānāsur, the

devotee of the thousand hands and commander of Mahādeo’s army, lived with his daughter Ukhā. There is a tank here called Ukhā talai, which is supposed to contain the waters of all the sacred places in India, brought here by Ukhā. Sohāgpur may also be the Shonitpura to which Munja, the brother of Bhoja Rājā, transferred his seat of government from Ujjain. In more historic times, about the end of the eighteenth century, Sohāgpur was the seat of Faujdār Khān, a Muhammadan jāgirdār, who held the surrounding country for the Rājās of Nāgpur. He built a fine stone fort, the remains of which were used as a police Station-house until 1906. This fort was attacked in 1803 by Wazir Muhammad of Bhopāl, and successfully resisted his assault. About this time there was a mint here for some ten years, and a Sohāgpur rupee was struck worth about 13 annas.

The chief industry is dyeing, for which the water of the

Local trade industries. Palakmatī is supposed to be especially suit-

ed. There are several houses of Chhipas, who both dye and print, and also of Rangrez, who dye only. Some country cloth is also woven here by Katias, who

are capable of fine work, and Kotwārs. *Razais* and bedding cloths are a speciality. *Tasar* silk was formerly woven here, but this industry is now extinct. Good earthenware pottery is made by Kumhārs and is exported to the neighbouring Districts and to Bhopāl. Kaserās make brass anklets, toe-rings and earrings, by moulding, not hammering. Another important industry is betel growing; Sohāgpur *pān* is well known and is exported to many places. As a commercial town, Sohāgpur occupies a good central position on the railway, and communications to surrounding villages are good. Notwithstanding this, and its importance as a manufacturing town and the tahsil headquarters, Sohāgpur is easily surpassed as a trading centre by the neighbouring villages of Piparia and Semrī. During the five years ending 1906, rail-borne exports only averaged 74,000 maunds a year or 3 per cent. of the total exports of the district, as against an annual average of 372,000 maunds at Pipariā and 130,000 maunds at Semrī. This inferiority is attributed to the system of octroi taxation, and the difficulties and delays in obtaining refunds, which have diverted through traffic to railway stations where no such obstacle exists. Whatever may be the reason, it is certain that the once important grain trade of Sohāgpur is now insignificant. There is still, however, a considerable market for forest produce, especially teak from the Borī range. There is a weekly market on Thursdays.

The municipal schools are an English middle school, which was opened in 1879, and a primary Public institutions. school for boys attached to it. There are also two schools for girls and one for boys controlled by the missions. The chief buildings are the tahsil offices, the dispensary, the range office of the Sohāgpur range, the English church, the police Station-house, and the bonded warehouse for country liquor. There are also an inspection bungalow, a forest rest-house, and a *sarai*. The town has a post

office and a telegraph office. The railway station is of importance, and the railway community is considerable.

Sonbhadra River.—A river of the Sohāgpur tahsil, and a tributary of the Denwā. It rises in Chhindwāra, and after being joined by the Borī river, which flows down from the western slopes of Dhūpgarh, runs northwards through a deep gorge in the intervening mountain range into the valley of the Denwā, which it joins at Chormālni. It and its confluent the Denwā completely encircle the Mahādeo hills. In spite of its name, there is no record of any gold ever having been found in its bed.

Takhu.—A village in the Hoshangābād tahsil, 10 miles south of Itārsi railway station. Population 200. It is the residence of the Tāku branch of the Sūbahdār family, which owns the Bordhā estate.¹

Tawa River.—After the Nerbudda, the largest river in the District. It rises in the hills of the Chhindwāra jāgirs, and after flowing for some distance through Betūl, enters the District at the border of the Hoshangābād and Sohāgpur tahsils, between which it forms the boundary for some distance, and finally enters the Nerbudda at Bāndarābhān, 5 miles east of Hoshangābād. Its total length is 105 miles. So long as it keeps among the hills, the river flows in a narrow bed, but as soon as it reaches the plain, its width becomes considerable. Just as it leaves the hills, it is spanned by a fine bridge of the Great Indian Peninsular Railway, which was opened by the Duke of Edinburgh. The scenery here is very picturesque. The Tawā drains a considerable area, and is notorious for the suddenness and fierceness of its floods. Its chief tributary is the Denwā, a river of considerable size, which joins it just before quitting the jungle. The bed of the Tawā exposes many fine sections showing the geological structure of the hills through which it has forced its way. Agriculturally, the river causes considerable damage from

¹ See para. 98.

the quantity of sand it brings down, but for a short distance near its mouth some irrigation is attempted from it.

Tiloksendur.—A small hill in the Hoshangābād tahsil lying in the village of Khatāma, 9 miles south-west of Itārsi railway station. White sandstone is quarried from the hill and sent to Dolaria railway station for export. Here, on the bank of the Khāri nāla, is one of the few real antiquities that the District can boast, the rock-cut cave of Tiloksendur.¹ The 70 steps, by which the temple is reached, were constructed by a former patel of the neighbouring village of Zamāni. A small fair is held here on the day of Shivrātri.

Tigharia.—A small village in the Hoshangābād tahsil, situated on the bank of the Nerbudda, 12 miles south-west of Hoshangābād. It is held revenue-free by a family of Gosains for the maintenance of an old temple of Mahādeo on the bank of the river. The grant is said to date from the time of Dost Muhammad's conquest at the beginning of the 18th century. A small market is held here on Tuesdays; market dues of one pice a shop are paid to the Gosain mālguzār, and of half a pice to the Kotwār and village sweeper. The village has a primary school.

Timarni.—A large and important village in the Hardā tahsil, situated on the Great Indian Peninsula Railway, 9 miles east of Hārdā. Population 4500. Timarnī is the chief village of a *muāfi* or revenue-free estate, held by the Brāhman family of Bhuskute, who acquired it as a jāgir in the 18th century.² The old fort is still in good preservation, and is occupied by the Bhuskute's agent, who bears the title of *killedār* or “holder of the fort.” Many mālguzārs of surrounding villages, chiefly Marāthā Brāhmans, reside here, attracted by the presence of the Bhuskute, and the population also includes a number of moneylenders. Trade is

¹ See para. 43.

² See para. 98.

considerable, the principal exports being wheat and cotton from the surrounding villages, and forest produce from Rahatgaon and Betūl. Rail-borne exports during the five years ending 1906 averaged 192,000 maunds or 8 per cent. of the District total, while imports during the same period averaged 52,000 maunds or 6 per cent. of the District total. The chief local industries are the manufacture of betel nut-cutters, which are exported to Upper India, and weaving. There is also a cotton ginning factory. *Pān*, or betel, and plantains are grown in the surrounding gardens. The chief institutions are a vernacular middle school, a primary school for girls, a police station-house, cattle pound and post and telegraph offices. The Christian Mission maintain a dispensary here.

Turon Kalan.—A village in the Sohāgpur tahsil, 3 miles south-west of Piparia railway station. Population 1000. In the 18th century it was the headquarters of the officer of the Rājā of Deogarh who managed the affairs of Sohāgpur. A large weekly bazar is now held on Mondays. The population includes some Katia weavers. There is a primary school and a post office.

Umardha.—A large village in the Sohāgpur tahsil, lying at the junction of the Dudhī and the Nerbudda, 14 miles north of Bankherī railway station. Population 2000. Umardhā is the chief of 3 villages forming a small estate held in inferior proprietary right from the Fatehpur-Nadipurā Rājā by a connection of his house. The present proprietor is Diwān Kishan Kuar, who has been under Court of Wards management for debt since 1895. The *sīr* land of Umardhā, which lies on the alluvial deposit at the mouth of the Dudhi river, and contains a good stretch of the valuable *kachhār* soil, is famous for its fertility. A number of well-to-do moneylenders reside at Umardhā and a good weekly market is held on Mondays. The village has a primary school, a cattle-pound and post office.

Bound by
Bharati.

13, Patwarbagan Lane,

Date. 18 NOV 1858

